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PROGRESS REPORTS

ON

FOREST ADMINISTRATION IN BURMA

FOR

The year 1892-93.

WITH A REVIEW BY THE CHIEF COMMISSIONER AND THE ORDERS OF THE GOVERNMENT OF INDIA.

RANGOON:

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1894.

No. 648-F., dated Simla, the 21st June 1894.

From—SIR E. C. BUCK, KT, C.S.I, Secretary to the Government of India, Department of Revenue and Agriculture,

To—The Chief Commissioner of Burma.

I AM directed to acknowledge the receipt of Mr. Bayne's letters Nos. 132—2 R.-1 and 135—2 R.-3, dated the 6th January and 6th February 1894, respectively, forwarding the Progress Reports on Forest Administration in Lower and Upper Burma for the period of 15 months, extending from 1st April 1892 to 31st June 1893, together with your Resolutions thereon.

2. The chief administrative measures involving change were the division of Upper Burma into two circles; the promulgation of a revised edition of rules under the Upper Burma Forest Regulation, and their extension to parts of the country which had till then been exempted; the enhancement of the royalty on timber extracted for trade purposes in the upper portion of the province; and the inclusion of *kaungmhoo* (*Shorea stellata*) in the list of reserved trees.

The Government of India consider that these measures were necessary. The division of Upper Burma into two charges was necessary, owing both to the extent of the country to be controlled and the character of the work required. The revision of the rules became advisable, in order to prevent illegal felling, especially of cutch trees; to secure a less wasteful working generally; and to provide for the sale of cutch licenses by auction. The extension of the rules to areas formerly exempted was required, because of the development of trade in those regions. The enhancement of royalty was based on the increase in the local value of timber, and secures to Government a fair share in the profits, and not more. Lastly the reservation of *kaungmhoo* places this tree in the same category as other kinds extensively used for boat-building, and guards against the species being overworked.

3. Owing to the addition of 1,307 square miles, of which 1,127 were accounted for by Upper Burma, to the area of reserved forests, the province now contains 7,407 square miles of this class of forests, and in addition 652 square miles of karen areas. Satisfactory progress has been made in forest settlements, and considerable additions to the areas of reserves may be expected in Upper Burma and in the Pegu Circle. The scheme of forming karen areas as an integral portion of the reserves meets, it is observed, with your approval, and has fulfilled for upwards of 16 years all the advantages claimed for it by the Conservator, who introduced it in 1877. The system has been extended to Upper Burma, and has facilitated, in Pyinmana, the extinction of the taungya method of temporary cultivation, which affected the most valuable area in the heart of the forests. The extinction of taungya methods of cultivation has now been compensated for by the grant of lands fit for permanent cultivation; and liberal advances for the purchase of cattle and other agricultural requirements have still further helped to free the measure from any possibility of adverse criticism.

4. The area of forests temporarily protected under the Upper Burma Forest Regulation was, at the end of the period under review, 24,740 square miles. The forests are taken up tentatively after preliminary examination and are, upon subsequent and more thorough enquiry, either constituted reserves or thrown out as useless or better adapted for agricultural purposes. The principle is sound and its application has been satisfactory. During the 15 months under notice, 12,143 square miles were thus added, and 3,864 square miles were either reserved, or abandoned as unsuitable for forest purposes.

5. The present extent of areas controlled by the Forest Department, as distributed amongst the four circles, is as follows :—

Circle.	Reserved forests.	Taungya area.	Forests protected under the Upper Burma Forest Regulation.	Total.	Proportion of forests to area of province.
	Sq. ms.	Sq. ms.	Sq. ms.	Sq. ms.	Per cent.
Pegu	3,468	449	...	3,917	4½
Tenasserim	1,866	12	...	1,878	2
Total Lower Burma (87,220 square miles.)	5,334	461	...	5,795	6½
Eastern	1,270	177	9,347	10,794	14
Western	803	19	15,393	16,215	21
Total Upper Burma (77,296 square miles.	2,073	196	24,740	27,009	35
GRAND TOTAL ...	7,407	657	24,740	32,804	20

6. Progress in the permanent demarcation of reserves was, owing to the increase of other business, to the scarcity of officers of all grades, to deaths and sickness amongst the subordinate staff, and to other unavoidable causes, somewhat retarded, especially in the Western and Tenasserim circles. It is, however, evident that every effort was made to cope with the work, of which the importance was recognized. Good progress was made in regular survey operations by the Imperial Survey Party No. 20 in the Toungoo division, and by the Forest Branch of the Imperial Survey in Tenasserim and in the Pyinmana divisions. A special feature, however, and one which the Government of India have noticed with satisfaction, is the mapping of large areas in Upper Burma by local forest officers, carried out hand in hand with the exploration of the forests. The maps are not so accurate and do not contain the same amount of detail as those of regular surveys; but they are in most instances accompanied by valuation estimates, and are consequently of much use in connection with the selection of reserves, with final settlements, and with the framing of working-plans.

7. The Pegu circle continues to maintain the lead in the preparation of regular working-plans, but laudable activity was displayed in all circles in the systematic collection of data necessary for permanent schemes for the conservative working of the forests. Preliminary plans-of-operation formed the basis of all important exploitation, and are now, it is observed, generally adhered to.

8. The total number of forest offences either brought into court or compounded was 2,623, of which 2,018 occurred in Lower Burma. The Thayetmyo district exhibited the largest increase in the Lower Province and Mandalay in the Upper. In regard to Thayetmyo, the Chief Commissioner, while acknowledging the zeal of the forest officers, desired them to bear in mind that Thayetmyo is a poor district, and that it is not expedient to harass the people by a too strict enforcement of the forest law. And in regard to Upper Burma, the Chief Commissioner also reminds District officers that "the people are not yet accustomed to our forest laws, and that the authorities should be careful to administer them with leniency." In these cautions the Governor General in Council entirely concurs. In Upper Burma especially, it is essential that the punitive provisions of the law should be administered with the utmost possible leniency.

The Revenue authorities have aided considerably in the protection of teak and other reserved trees; and in the detection and suppression of illicit cutch-boiling, which, owing to the large profits realizable and to the smallness of the forest staff, appears to have been carried on to a considerable extent in both the Upper Burma circles.

The protection of cutch in Upper Burma would seem to be complicated by claims to trees on so-called "*bobabaing*" land, *i.e.*, land claimed as private property because it had at some time been cultivated permanently or temporarily by the persons concerned or by their ancestors, claims which are often extended to the adjacent forests. In view of the fact that a considerable difference of opinion exists on the subject, and that a large portion of the Burma forests consists of *poonzoh* or deserted temporary cultivation, the origin of these claims and their recognition by former Governments should be brought under decisive enquiry at an early date.

9. The area protected from fire was decreased by 11 square miles, chiefly owing to failures in the Thayetmyo, Tharrawaddy and Rangoon divisions. In Tenasserim, the results were particularly good. In Upper Burma, artificial protection is as yet restricted to selected areas in the Pyinmana and Ruby Mines districts. The interesting fact that forests fire-protected for some time produced a much richer vegetation and assumed under favourable circumstances some of the characteristics of an evergreen forest, had been observed on a previous occasion in the case of the Mokka Beeling. Although the circumstance may render the natural reproduction of teak, without assistance against other species, somewhat more difficult, it is of special importance that all areas where such reproduction has taken place, or where assistance can be given in one form or other, should be most carefully protected. The suggestion that fixed camping-places should be established in the reserves seems a good one.

10 The paragraphs dealing with natural reproduction and with the measures adopted to increase the proportion of teak and other valuable trees in the future peuplement of the forests have been read with interest. Good progress has been made, especially by the extension of taungya plantations which now cover an area of nearly 36,000 acres in Lower Burma, and are being extended into the Upper part of the province.

11. The girdling operations of the period included the killing of 38,540 teak, of which 21,400 were girdled in Lower and 17,140 in Upper Burma. It is observed that the girdling programme in the Eastern circle could not be carried out, owing to the exhaustion of mature teak in the leased forests. The supervision by departmental officers of all girdling operations is justified by the fact that during the girdling operations of 1888, which, under force of circumstances, were carried out by the Bombay-Burma Trading Corporation without supervision, all trees of marketable size, whether they formed groups or stood singly, were girdled, and the trees when killed by girdling were not extracted with sufficient rapidity to ensure them against the risk of fire. Any such disregard of sylvicultural requirements as was exhibited in the case just quoted is much to be regretted.

12. The outturn of forest-produce during the period of 15 months is exhibited in the following table;—

Class of Forests and Agency by which removed	Timber.			Fuel.			Total Timber and Fuel.			Bamboos.			Minor produce.		
	Lower Burma.	Upper Burma.	Total.	Lower Burma.	Upper Burma.	Total.	Lower Burma	Upper Burma	Total.	Lower Burma.	Upper Burma.	Total.	Lower Burma.	Upper Burma.	Total.
Reserved.	Cubic feet.	Cubic feet.	Cubic feet	Cubic feet	Cubic feet	Cubic feet	Cubic feet	Cubic feet.	Cubic feet.	No.	No.	No	Rs.	Rs.	Rs.
Government	1,586,398	...	1,586,398	...	...	.	1,586,398	...	1,586,398	...	...	...	...	..	...
Purchasers	495,947	429,268	925,215	27,450	137,500	164,950	523,397	566,768	1,090,165	4,607,500	...	4,607,500	33,390	...	33,390
Right-h lders .	2,112	...*	2,112	250	45,750	46,000	2,362	45,750	48,112	2,750	...	2,750	2	...	2
Free-grants	...	13,300	13,300	...			...	13,300	13,300	150	...	150	..	...	...
Total ...	2,084,457	442,568	2,527,025	27,700	183,250	210,950	2,112,157	625,818	2,737,975	4,610,400	...	4,610,400	33,392	...	33,392
Protected.															
Government	...	171,114	171,114	...	...	.	...	171,114	171,114	...	*...	...	...	...	...
Purchasers	...	12,052,780	12,052,780	...	3,522,223	3,522,223	.	15,575,003	15,575,003	...		...	...	...	...
Right-holders	...	...		...	...	...	...	...	. .	...	..	. .	...	...	...
Free-grants	.	511,118	511,118		...	..	.	511,118	511,118	.		...	...	...	
Total ...	...	12,735,012	12,735,012	...	3,522,223	3,522,223	...	16,257,235	16,257,235	...	.	...	...	...	...
Unclassed.															
Government	1,310,607	...	1,310,607	...	...	...	1,310,607	...	1,310,607	...	...	...	...	†832	832
Purchasers	9,675,488	...	9,675,488	4,949,226	...	4,949,226	14,624,714	...	14,624,714	17,852,057	21,683,861*	39,535,918	56,561	† 3,42,513	3,99,074
Right-holders	16,406	...	16,406	...	.	...	16,406	...	16,406	47,540	...	47.540	2	...	2
Free-grants	32,735	...	32,735		...	...	32,735	...	32,735	26,669,202	...	26,669 202	...	...	...
Total ...	11,035,236	...	11,035,236	4,949,226	. ...	4,949,226	15,984,462	...	15,984,462	44,568,799	21,683,861	66,252,660	56,563	3,43,345	3,99,908
Grand total in 1892-93	13,119,693	13,177,580	26,297,273	4,976,926	3,705,473	8,682,399	18,096,619	16,882,053	34,979,672	(a)49,179,19(	b)21,683,861	7(,863,060	89,955	3,43,345	4,33,300
„ „ in 1891-92	11,773,094	7,352,485	19,125,579	2,802,034	1,506,598	4,308,632	14,575,128	8,859,083	23,434,211	5,951,373	11,845,936	17,797,309	51,450	2,37,287	2,88,737
Difference in 1892-93	+1,346,599	+5,825,095	+7,171,694	+2,174,892	+2,198,875	+4,373,767	+3,521,491	+8,023,970	+11,545,461	+43,227,826	+9,837,925	+53,065,751	38,505	1,06,058	1 44,563

Value Rs. (*a* Rs. 1,24,341 + (*b*) Rs. 51,203 = Rs 1,75,544.

* Class of forests from which these bamboos were extracted is not mentioned in the report.

† Class of forests from which this produce was removed is not mentioned in the report.

Allowing for the extra period of three months covered by the returns, a considerable increase in the outturn of forest-produce of every description took place.

13. The results for the financial year of 1892-93, as compared with the preceding year and with the average of the last five years, are shown in the following table, in which the results for the forest year are also shown :—

	Year.	Circle.	Receipts.	Charges.	Surplus.	Proportion of surplus to gross revenue.
			Rs.	Rs.	Rs.	Per cent.
Forest Year (from 1st July 1892 to 30th June 1893.)		Pegu	25,54,543	9,66,076	15,88,467	62
		Tenasserim	8,08,504	3,90,025	4,18,479	52
		Total, Lower Burma ...	33,63,047	13,56,101	20,06,946	60
		Eastern	15,84,028	2,88,817	12,95,211	82
		Western	5,25,983	1,73,562	3,52,421	67
		Total, Upper Burma ...	21,10,011	4,62,379	16,47,632	78
		Grand Total, Burma, 1892-93...	54,73,058	18,18,480	36,54,578	67
Financial Year.		Pegu	27,87,596	9,15,848	18,71,748	67
		Tenasserim	7,95,776	3,89,760	4,06,016	51
		Total, Lower Burma ...	35,83,372	13,05,608	22,77,764	64
		Eastern	15,55,533	2,79,869	12,75,664	82
		Western	5,21,096	1,61,879	3,59,217	69
		Total, Upper Burma ...	20,76,629	4,41,748	16,34,881	79
		Grand Total, Burma, 1892-93...	56,60,001	17,47,356	39,12,645	69
		Grand Total, Burma, 1891-92...	41,85,414	16,98,980	24,86,434	59
		Increase in 1892-93 ...	14,74,587	48,376	14,26,211	10
		Average for the five years ending 1891-92.	40,30,634	15,73,066	24,57,568	61

The results are the best on record, and the surplus exceeds even that of 1889-90 by nearly 6 lakhs of rupees.

14. The remarks made by the Revenue authorities, which are appended to the reports, on questions of forest administration have been read with great interest.

The reports are concise and satisfactory records of a year's successful administration, and His Excellency the Governor General in Council endorses the commendation which has been bestowed on the Conservators and the forest staff generally in the exhaustive resolutions reviewing the reports which are themselves indicative of the interest taken by the Local Government in the forest administration of the province.

G. C. Press, Simla.—No. 245 R. & A. D.—26-6-94.—180.

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RESOLUTION

ON THE

FOREST ADMINISTRATION REPORT

OF

UPPER BURMA

For the year 1892-93.

Extract from the Proceedings of the Chief Commissioner, Burma, in the Forest Department,—No. 2R.-3, dated the 18th January 1894.

READ—

Reports of the Conservators of Forests, Eastern and Western Circles, for the year 1892-93.

RESOLUTION.—The Conservators' reports deal with the period extending from the 1st April 1892 to the 30th June 1893, or fifteen months in all, in accordance with the orders contained in the opening paragraph of Revenue and Agricultural Department Circular No. 16F., dated the 7th June 1892. The reports were, as usual, submitted with punctuality.

2. The Upper Burma Forest Circle was, with effect from the beginning of the financial year, divided into two—the Eastern and the Western Circles—each under the charge of a Conservator, with his headquarters at Mandalay. During the year the Chindwin division was formed into two Deputy Conservators' charges, the Upper and the Lower Chindwin divisions, and three new subdivisions were constituted, namely, those of Paungbyin, Mingin, and Gangaw.

Reservation of forests.

3. The total area of reserved forests in the Eastern Circle on the 30th June 1893 amounted to 1,447 square miles. Of this an aggregate of 627 square miles was reserved during the year. The new reserved forests were six in number, one with an area of 36 square miles being in the Bhamo and the remaining five in the Katha forest division. During the open season of 1892-93 Messrs. E. P. Cloney and D. L. Richardson were employed as Settlement Officers in the Eastern Circle and held enquiries in regard to areas, amounting in the aggregate to 783 square miles, which it has been proposed to reserve in the Bhamo, Katha, and Mu divisions. Final orders in the matter of these proposed reserves had not been passed at the close of the year. An area of 242 square miles was awaiting enquiry on the 30th June 1893, and this area, together with some additional blocks which have recently been notified for reservation, are now being dealt with by a Forest Settlement Officer. Large advances were made during the year to cultivators in connection with the reservation of forests in the

Pyinmana division with a view to the extinction of their taungya privileges in the Pyinmana reserves which were formed in 1891.

4. In the Western Circle the area of reserved forests was increased by 583 square miles in the Upper Chindwin and Minbu divisions. The Forest Settlement Officers who held enquiries in regard to the reservation of forests in the Western division during the year were Lieutenants Warde and Green and Messrs. Sharpe and Browne. The enquiries held by these officers covered an area of 1,133 square miles, which left a total of 799 square miles notified before and during 1892-93 still to be enquired into at the close of that year. To this total must be added the area of the proposed Bôn and Kyauksit reserves in the Upper Chindwin and Yaw divisions. The enquiry into the first of these reserves was completed during the year, but the proceedings have been mislaid and a fresh enquiry will be held during the current year. The Kyauksit enquiry was not completed at the close of the year and the work is now being undertaken afresh by the Forest Settlement Officer who has been appointed to enquire into this and other reserves during the present open season.

Examination of forests.

5. The large amount of settlement and demarcation work done during the year prevented Forest Officers in the Eastern Circle from making much progress in the examination and exploration of teak forests in their charges. A certain amount of work was, however, performed under this head in the Bhamo, Katha, and Mandalay divisions and in the Southern Shan States. The total area of protected forests in this circle at the close of the year was 9,347 square miles as compared with 5,797 square miles at the end of 1891-92. In the Western Circle the area of protected forests was increased from 10,594 square miles to 15,393 square miles. The examination of forests was carried on to a certain extent in all four divisions of this circle. In the Upper Chindwin Mr. Bruce examined considerable areas of teak forest, and in the Lower Chindwin Mr. Thompson visited the Mahamyaing teak forests, and examined cutch forests in various parts of the division. Some good cutch areas were discovered in the Minbu division also during the course of the year.

Surveys and working-plans.

6. In the Eastern Circle a detachment of the Imperial Forest Survey was engaged during the year in the survey of portions of the Pyinmana forest division. For a part of the year the Deputy Conservator, Pyinmana, was placed in charge of this survey. As the Conservator has pointed out in paragraph 23 of his report, this arrangement, which compels the Deputy Conservator to devote much of his time to business outside the scope of his regular duties to the detriment of his legitimate work, is unsatisfactory. The officer in general charge of the Survey has been asked to arrange that the Divisional Forest Officer shall not in future be taken from his regular work on account of the forest survey in Pyinmana, which will be continued during the current year. In the other divisions of the Eastern Circle surveys were carried out by the agency of local Forest Officers. In the Western Circle such surveys as were made were carried out entirely by local agency. A total of 170 miles of linear survey was completed in the Upper Chindwin division, and in the same division a portion of the tract of country watered by the Chaunggyi stream and its tributaries was mapped out. In the

Lower Chindwin division areas in the Kanni township and in the Mahamyaing forest were surveyed. Owing to the presence of Tauk Ta and his gang in the Minbu district during a portion of the year, it was not considered possible to execute much survey work in the Minbu forest division during the open season of 1892-93. Tauk Ta and his gang have now been all accounted for. Valuation surveys were executed during the year in the Bhamo, Katha, and Mandalay divisions of the Eastern, and in the Upper and Lower Chindwin and the Minbu divisions of the Western, Circle. Two hundred and ninety-five miles of reserved boundaries were demarcated in the Eastern Circle during the year of report. In the Western Circle only 13 miles were demarcated. The work of demarcation appears to have been neglected in the Minbu division.

Forest Rules.

7. A revised edition of the rules under the Upper Burma Forest Regulation was published in April 1893. The principal modifications made in the rules were as follows. The rule requiring licenses to be taken out for the extraction of unreserved timber for trade purposes was extended to the whole of Upper Burma, the form of cutch license was altered in order to provide for the sale of such licenses by auction and to afford additional security against illegal felling, and changes were made in the forms of licenses for felling reserved timber for the purpose of preventing wasteful working. Simultaneously with the publication of the revised rules, notifications were issued enhancing the royalty levied on timber of all kinds extracted for trade purposes in Upper Burma. The enhancement was made on a consideration of the value of timber, the condition of the local trade, and the necessity of securing to Government a fair share in the value of timber extracted.

Forest offences.

8. In the Eastern Circle the number of cases of breach of forest rules was 461, or more than double the corresponding number for 1891-92. The increase was partly due to the fact that the period under review covers fifteen instead of twelve months, partly to greater activity on the part of Forest Officers. Of the above cases, 243 were eventually taken into court, and in 203 cases convictions were obtained. The number of cases compounded in this circle was 197, and a sum of Rs. 3,907 was realised in the shape of compensation accepted under the provisions of section 62 of the Forest Regulation. The increase in the number of cases took place principally in the Mandalay division, where they rose from 26 to 160. When account is taken of the extent of the Mandalay division the number of cases is not in itself large, but the very large increase which took place suggests the inference that there was too rapid a transition from a state of affairs in which the law was almost a dead letter to a state of affairs in which it was somewhat strictly enforced. District Officers in Upper Burma must remember that the people are not yet accustomed to our forest laws and should be careful to administer them with leniency. The total of new forest cases reported during the year in the Western Circle was 175, which, with 13 cases pending from the previous year, made the total for disposal 188. Of this total, 185 cases were actually disposed of and three remained undisposed of at the close of the year. Sixty-eight cases were taken into court, and in 56 of these cases convictions were obtained. A total of 117 cases were compounded under the provisions of

section 62 of the Upper Burma Forest Regulation, the compensation amounting in these cases to a total of Rs. 3,175 These figures are not complete as the records of a large number of cases occurring in the Upper Chindwin were destroyed in the Kindat Forest Office, which was burnt down in the early part of 1893. The number of new cases in 1891-92 was 159.

Fire-protection

9. In the Yanaungmyin reserve in the Pyinmana division systematic fire-protection operations were undertaken during the year, and the total area protected was considerably enlarged At Bernardmyo and Mogok steps were taken to protect the plantations and orchards, but beyond the above little was done in the way of fire-protection in the Eastern Circle. As in 1891-92 no systematic operations were undertaken during the year in the Western Circle to protect forests from fire. It will probably not be possible to do much in the direction of fire-protection in Upper Burma until the forest establishments are considerably increased.

Experimental cultivation.

10. In the Eastern Circle the departmental orchards and plantations in the districts of Bhamo and the Ruby Mines and at Maymyo in the Mandalay district were maintained during the year. The experimental cultivation of the various species of eucalyptus was continued at Bhamo and Mogôk, but no marked progress has been made in the introduction of the tree The fruit trees at Bernardmyo did rather better than in the previous year. No experimental cultivation was carried on during the year in the Western Circle.

Girdling.

11 A total of 1,715 teak trees were girdled during the year in the Eastern Circle for lessees and on Government account; of this total 891 trees were for the Bombay Burma Trading Corporation, 185 for the lessee of the Shweli forest, and 383 for the Mongpan Sawbwa. As in 1891-92 difficulty was experienced in carrying out in its entirety the girdling programme originally fixed for the circle, owing to the exhaustion of the resources of the forests. The whole of the girdling undertaken during the year in the Western Circle was for the Bombay Burma Trading Corporation. In the Upper Chindwin division 14,971 trees were girdled on this account and in the Yaw division 455. The number girdled in the Upper Chindwin was below the estimate originally sanctioned, namely, 15,703 trees.

Extraction of timber

12. A total of 652 logs, containing 32,238 cubic feet of timber, were brought out by Government agency in the Eastern Circle during the year, and realized a sum of Rs 13,948 when sold. The timber extracted by lessees in this circle between the 1st April 1892 and the 30th June 1893 amounted in all to 82,137 logs, weighing 96,792 tons, on which royalty to the amount of Rs. 9,55,203 was paid The amount of revenue paid on the timber extracted by lessees during the financial year 1892-93 was Rs. 9,53,374, against a revenue of Rs 3,89,138 only of 1891-92 The reason for this increase was the exceptionally favourable nature of the year for floating work. The total of timber extracted from the forests in the Southern Shan States was 16,965 logs, weighing 15,080 tons. Under trade licenses 88,594 tons of timber were extracted from the forests in the Eastern Circle; of this total 13,709 tons consisted of pyingado cut for the construction of railway sleepers. There was a very considerable increase in extractions both of teak and unreserv-

ed woods in 1892-93 as compared with the extractions of 1891-92. In the case of teak the increase was due to the more favourable floating season, in the case of unreserved timber to the more extended use of woods of this class. No timber was worked out by Government agency in the Western Circle. Under the head of timber extracted by lessees the figures for the year show 38,082 tons of teak extracted by the Bombay Burma Trading Corporation from the forests in the Upper and Lower Chindwin and the Yaw and Minbu divisions. In the case of the Chindwin forests the total outturn (37,280 tons) was considerably in excess of that of the previous year, but in the Yaw and Minbu divisions the extractions were, owing to a bad floating season and to the sickness of the Corporation's representative at Pakôkku, considerably below the sanctioned minimum. The question of levying the penalty prescribed by the leases on account of the shortage was considered by the Officiating Chief Commissioner after the close of the year. In consideration of the exceptional circumstances of the case and with a view to the fact that the short extraction of the year has been made good in the following year Mr. Fryer decided not to enforce the penalty. The amount of teak extracted during the year under licenses or brought to revenue stations in the Western Circle was 3,428 tons, and that of timber, reserved and unreserved, other than teak, 7,665 tons.

Minor forest produce.

13. In the Eastern Circle a total of Rs. 2,31,615 was derived from minor forest produce. The largest item in this total was a sum of Rs. 2,19,498, which represented revenue derived from rubber in the Bhamo district. The royalty on this product was raised from 8 to 12 annas from the 1st January 1893, as a result of the enquiries made by the Forest Officer who visited the Hukong Valley in the cold weather 1891-92. This officer found that the price paid for rubber to the Kachin extractor had increased enormously during the last five years, while the price in Rangoon had remained stationary. The royalty was accordingly raised as it appeared just that Government should receive some share in the increased profits of the Kachins. From cutch revenue a sum of Rs. 10,270 was obtained, while the total realised from minor produce of other kinds was Rs. 4,847. The revenue from minor forest produce for the financial year 1892-93 was Rs. 1,31,461 as compared with Rs. 1,66,579 in 1891-92. The decrease occurred under the head of cutch, for which less than one-tenth of the total of licenses issued in 1891-92 were issued during 1892-93. The revenue of the Western Circle from minor forest produce during the year under review was Rs. 1,05,384 and during the financial year Rs. 94,955 and Rs. 69,955 in 1891-92. There was a large reduction in the outturn of cutch in this circle, and a further decrease will in all probability occur during the current year, as it has been ascertained that the cutch forests in the Minbu, Yaw, and Lower Chindwin divisions are not capable, without premature exhaustion, of yielding such large quantities of the product as have been extracted from them in former years, and steps have been taken to further curtail the issue of licenses for the extraction of cutch in these areas. Although the outturn of cutch was smaller in 1892-93 than in 1891-92, the raising of the license fee from Rs. 20 to Rs. 60 per cauldron has, as was anticipated, resulted in an increase of revenue under this head over the figures of the previous year.

Revenue and expenditure.

14. The revised estimates of receipts and expenditure in the two forest circles of Upper Burma for the year 1892-93, as finally sanctioned by the Government of India, were as follows :—

	Rs.
Receipts	20,75,000
Charges	4,45,000
Surplus ...	16,30,000

The actuals of the year were as follows :—

	Rs.
Receipts	20,76,629
Expenditure	4,41,747
Actual net surplus ...	16,34,882

that is, Rs. 4,882 more than the estimate finally sanctioned by the Government of India. The gross receipts were higher, in round numbers, by $2\frac{3}{4}$ lakhs of rupees and the net receipts by one lakh than those of any previous year. The gross and net receipts were higher than those of the previous years by, in round numbers, $7\frac{1}{2}$ and $6\frac{3}{4}$ lakhs respectively. As has has been explained in the preceding paragraphs, the large increase of revenue in 1892-93 was due mainly to larger extractions of teak by lessees and local purchasers. The increase in expenditure took place mainly under the head "Establishment" and was due to increases of the forest staff which were rendered necessary by the development of forest operations.

Shan States forests.

15. A report by Mr. Jackson, Deputy Conservator of Forests, on his work during the previous season in the Southern Shan States was received and orders were passed on it during the year. The principal modification introduced by these orders in the arrangements then in force in regard to the administration of the Southern Shan States forests was an alteration in the system under which royalty is paid by the Shan Sawbwas on the forests in their States. The practice up till then had been to calculate the royalty on the number of elephants employed in working the forests, but this practice was found to be in many ways objectionable and it was decided in 1892-93 to prescribe fixed sums as the royalty which each State was to pay for a series of years. In accordance with this decision the royalty payable by the principal teak-producing States has been fixed on a consideration of the profits derived by the Sawbwas from the forests for a period of four years, *i.e.*, to the end of 1896, at sums ranging from Rs. 10,000 yearly in the case of Möngnai and Möngpan to Rs. 1,000 in the case of Kengkham. Shortly after the close of the forest year the Southern Shan States and the Myelat were formed into a forest division of the Eastern Circle, called the Southern Shan States division, with its headquarters at Fort Stedman.

Services of officers.

16. The statistics of revenue given in the previous paragraphs indicate that much excellent work was done by Forest Officers during the year under report. The rapid progress which is being made in developing the resources of the Upper Burma forests has rendered the existing staff of controlling officers quite inadequate, and proposals are now being submitted to the Government of India for increasing it by nine officers. The acknowledgments of the Chief Commissioner

are due to Messrs Home and Oliver for the energy and zeal displayed by them in the administration of their circles during the year.

By order of the Chief Commissioner,

C. G. BAYNE,

Revenue Secretary.

REPORT

ON

FOREST ADMINISTRATION

IN

THE EASTERN CIRCLE

For the year 1892-93,

BY

J. W. OLIVER, ESQUIRE, CONSERVATOR OF FORESTS, EASTERN CIRCLE.

CHAPTER I.

EXTENSION AND CONSTITUTION OF STATE FORESTS.

1.—Alteration of Area.

Area of reserved forests.

THE area of reserved forests has been increased by the addition of 627 square miles, and now stands at 1,447 square miles, of which 177 square miles are subject to privileges of ya cultivation.

Area of protected forests.

2. The area of protected forests which at the close of last year was 5,797 square miles is now estimated at 9,347 square miles; 627 square miles have been transferred to reserved forests, 112 square miles have been thrown out on further examination, 101 square miles have been deducted by survey corrections, and areas aggregating 4,390 square miles have been added. The latter are principally tracts which, though not teak-producing, are protected under the rules regulating the extraction of unreserved timber and produce, they do not include the India-rubber forests north-west of Bhamo, which have not yet been brought under direct administration, nor any forests other than teak forests in the Shan States.

Examination of forests.

3. Little was done in the way of exploration of new teak forests as Divisional Officers were mostly employed on Forest Settlement work or demarcation, but in the Bhamo and Katha divisions several tracts which had been insufficiently examined were further explored.

Teak forests examined in the Bhamo division.

4. The *Hakan forest*, 10 square miles, is a small teak area on the right bank of the Irrawaddy a little above Bhamo. A part of it is nearly pure teak, but being very accessible it has been heavily worked and but little good timber remains.

The *Indaw Kekku* forest, 30 square miles, is situated on a low range of hills opposite Shwegu. The extraction of timber is easy and there has been much illicit girdling carried on during the past few years; nearly all the best trees down to 3 feet in girth have been killed, but there is still a good deal of promising young growth left.

The *Mosit forest* has been further examined and the teak-producing area (which includes tracts of In—*Dipterocarpus tuberculatus*—forest with teak in the depressions) is now estimated at 130 square miles. A considerable portion of the forest is evergreen, or nearly so, with large teak trees scattered through it which have altogether failed to reproduce themselves. On the Natmaw chaung on the north and on the slopes of the Mawatôk hill on the east there is some forest that has been little worked in which girdling may possibly be carried on during the next few years. The drier parts of the forest have suffered very much from fire.

The *Nansônti forest*, 80 square miles, in the Kaukkwe drainage, consists in the lower lying parts of In forest, with teak of good growth near the streams, but much damaged by fires. On the hills the forest is mostly evergreen with here and there patches of teak or single trees. The growth of teak in this latter portion is very good, but reproduction is scarce and the forest has been much cut up by Kachin ya cultivators.

Teak forests examined in the Katha division.

5. A further examination of the Mèza proposed reserve has led to the abandonment of the tract as a single reserve, and to the selection of four blocks, Namkan, Tatlwin, Pile, and Pyinte, aggregating 219 square miles, which contain very valuable teak forest and are suitable for reservation. The remainder consists of village lands and evergreen hill forest.

The *Kalat forest*, 28 square miles, and the *Nami forest*, 31 square miles, were also examined as well as some areas in extension of the Petsut and Auktaw forests. The Kalat forest contains a fair proportion of large teak, but the rest mostly young growth.

Teak forests examined in the Mandalay division.

6. In the Mandalay division the forests on the Mèhong, a tributary on the right bank of the Myitngè in the Northern Shan States, were examined and found to contain only a very small quantity of teak, a large proportion of which was girdled prior to the annexation.

Cutch forest in the Mandalay division.

7. A forest ranger was employed during the greater part of the season examining the cutch forests in the Meiktila and Yamèthin districts, and the Divisional Officer made a short tour through the forest, but the only result has been the survey of some scattered patches of pure cutch forest aggregating 500 acres in extent. The Divisional Officer reports that the forests are so poor and contain so few cutch trees that he does not consider them worth reserving. The fact, however, remains that very large quantities of manufactured cutch are annually exported from these districts and his report cannot be considered as finally disposing of the question.

Teak forests examined in the Southern Shan States.

8. The forests on the Nam-Sangôn in the Kantutong circle of the Mawkmai State were examined but found to be practically worked out.

In the Möngpan State the forests drained by the Hwe Pang Pung (a tributary of the Hwehawn which flows into the Namteng) were found to contain a considerable quantity of girdled teak. Green mature trees are scarce, but the young growth is reported to be exceptionally abundant.

The forests on the Hwepaw, a tributary of the Nampan, were also visited. The stock of teak including a fair proportion of marketable green trees is said to be large and the younger classes are well represented.

The forests on the Nampan and in a less degree those in the Namteng basin are reported not to have been much worked and they may possibly serve as a source of supply when the remaining Shan Salween forests have been exhausted.

2.—Forest Settlements.

9. The progress made in Forest Settlement is shown in the following table:—

Division.	Reserves sanctioned prior to 1892-93	Reserves sanctioned during 1892-93.	Proposed reserves enquired into by Forest Settlement Officers during 1892-93.	Areas notified as proposed reserves but not yet enquired into.	Areas for the reservation of which proposals are in course of submission.	Total
	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.
Bhamo ...	..	36	191	...	210	437
Katha ...	35	591	186	...	284	1,096
Mandalay ...	...	...	...	...	...	...
Mu ...	...	...	406	242	149	797
Pyinmana ...	785	...	...	...	...	785
Southern Shan States	...	...	...	...	...	..
Total ...	820	627	783	242	643	3,115

Areas reserved.

10. The tracts noted below which were enquired into during the year 1891-92 have been notified as reserved forests:—

			Sq. miles.	No. and date of Notification.
Bhamo division ...	Setkala		36	37
Katha division ...	Nanime		167	38
	Kungyaung		68	39
	Maingtha		173	40
	Nahan		95	41
	Nampaw		88	42
	Total ...		627	

31st January 1893.

The above areas differ from those given in the notifications quoted which were subsequently found to be incorrect. The cost of the settlement including the pay and allowances of the Forest Settlement Officer amounted to Rs. 5,851, of which Rs. 5,768 were charged in the accounts of the year under review.

Some valuable teak forest north of and adjacent to the Nammè reserve was thrown out by the Forest Settlement Officer for the sake of procuring a natural boundary. Fresh proposals for the reservation of this area will be submitted.

Areas enquired into during the year.

11. Mr. E. P. Cloney, Extra Assistant Commissioner, and Mr. D. L. Richardson, Myoôk, were appointed special Forest Settlement Officers, the former for the proposed reserves in the Bhamo division and the latter for those in the Katha and Mu divisions.

Enquiries were conducted by these officers in regard to the following areas:—

		Sq. miles.
Bhamo division	Uya Hatha	24
	Himangin	41
	Nampa	126
Katha division	Mohnyin and Mohnyin extension	70
	Mawhun	42
	Petsut	74
	Auktaw	
Mu division	Kalawpa	8
	Wabo	16
	Nabè	18
	Tinwa	24
	Nanbyan	33
	Nankyitha	107
	Sareiktha	15
	Maingwun	60
	Pyaungthwe	70
	Yabin	60
	Total	783

The Forest Settlement Officers' proceedings were still in the hands of the appellate officers at the close of the year. The expenditure incurred on the enquiry amounted to Rs. 39, exclusive of the pay and allowances of Forest Settlement Officers which have not yet been adjusted.

Areas awaiting enquiry.

12. The only notified areas awaiting enquiry at the close of the year were the following—

Division.	Name of Forest.	Sq. miles.	No. and date of Notification.
Mu	Inga	23	215 of 4th July 1892.
	Sinlin	48	15 of 18th May 1892.
	Thaw	171	
	Total	242	

Reserve proposals in course of submission.

13. Proposals for the reservation of the following tracts were in course of preparation:—

Division.	District.	Forest.	Sq. miles.
Bhamo	Bhamo	Mosit	130
		Nansônti	80
Katha	Katha	Petsut, extension	18
		Auktaw, extension	8
		Namkan	52
		Tatlwin	79
		Pyinte	58
		Pile	15
		Nami	31
		Kalat	23
Mu	Katha	Kansa	51
		Seaing	10
		Laga	58
	Shwebo	Sadwingyi	30
		Total	643

It may therefore be expected that 885 square miles will be ready for the Forest Settlement Officer next season.

Proposals have been submitted by the Mandalay Divisional Officer for the reservation of 34 square miles on the left bank of the Myitngè in the State of Yatsauk, but as it is understood that the Superintendent and Political Officer is averse to any reservation in the Shan States the areas have not been entered on the above list.

Extinction of ya privileges in the Pyinmana reserves.

14. In the Pyinmana division 85 persons who held permanent taungya-cutting privileges in the reserves, and 76 persons who held temporary privileges as well as 18 persons who though not registered as privilege-holders were held by the Deputy Commissioner to be equitably entitled to be treated as such, were provided with plough cattle on loan, in consideration of their signing a renunciation of their privileges. Rupees 20,000 (the price of 166 pairs of plough cattle) were advanced for this purpose, the cattle purchased being taken as security for the repayment of the loan. There still remain 207 permanent and 238 temporary privilege-holders to be dealt with. The system of advances is being continued, and it is expected that it will be possible shortly to declare the greater part of the reserves free of all privileges in respect to ya-cutting.

Modification of boundaries of included village lands in Pyinmana.

15. On carrying out the demarcation and survey of the excluded areas contained within the Pyinmana reserves it was found that in many cases the lands intended to be excluded by the Forest Settlement Officer would fall within the reserves, if the boundaries were demarcated in accordance with the descriptions given by the Forest Settlement Officer, and that in other cases areas of old paddy-lands to which no claims were laid at the time of settlement had not been cut out. A revision of the boundaries will therefore be necessary as it is essential to exclude the whole of the old permanent cultivation in order to provide sufficient land for the people whose ya-cutting privileges are being acquired.

3.—Demarcation.

Demarcation, general.

16. Exclusive of inter-reserve boundaries the total length of the boundaries of sanctioned reserved forests is estimated at 863 miles; 231 miles were permanently demarcated during the previous year, and 295 miles during the year under review. About 25 miles require no demarcation, so that there remain about 312 miles still to be done, of which 110 miles have been laid out and temporarily demarcated by blazed lines. The cost of the demarcation of reserves amounted to Rs. 4,642.

Demarcation in the Bhamo division.

17. In the Bhamo division the final demarcation of the Setkala reserve was carried out by Mr. Dun, with the exception of a small portion in the north-east corner. Ninety-three mounds of earth with a post in the centre bearing a current number were erected and the trees on the lines connecting the mounds were blazed and marked with a hammer. The length of line so demarcated was 16 miles and about 5 miles still remain to be completed. The cost of the demarcation of the reserve amounted to Rs. 192.

Demarcation in the Katha division.

18. In the Katha division the western, southern, and a portion of the eastern boundaries of the Nammè, Kungyaung, Maingtha, Nahan, and Nampaw reserves (which form one continuous block) as well as the boundaries of the excluded areas contained within the reserves were demarcated in a similar manner by Messrs. Dun and Lowis.

Details of the demarcation are given in the following statement :—

Reserve.	Number of posts on mounds.	Length of blazed lines connecting mounds.	Approximate length of boundary remains to be demarcated.	Expenditure during year.
Nammè	415	77	15	Rs.
Kungyaung	139	19	...	1,875
Maingtha	419	88	21	
Nahan	90	21	...	503
Nampaw	169	44	18	

The numbering of the posts was not completed owing to the iron tablets running short.

Preliminary demarcation in the Mu division.

19. In the Mu division Rs. 624 were expended in blazing 74 miles of boundary line in the areas that were enquired into by the Forest Settlement Officer.

20. In the Pyinmana division 35 miles of the outer boundary line of the Palwe and Taungnyo reserves were demarcated by means of a blazed line connecting 127 numbered posts on mounds at a cost of Rs. 894, and 105 miles of boundary of village-sites included in reserves were blazed at a cost of Rs. 181. As the latter boundaries differ somewhat from those defined in the notifications reserving the forests, they have, pending the orders of Government, only been temporarily demarcated.

Demarcation in the Pyinmana division.

4.—Surveys.

21. A detachment of the Imperial Forest Survey under Mr. Nichol, Sub-Assistant Superintendent, was employed in the Pyinmana division from the middle of November till the end of May, but nothing beyond the preliminary work of traversing and triangulation was attempted. Four hundred and seven linear miles of theodolite traversing were run with two chains of different lengths over an approximate area of 450 square miles. The results of the traversing are now being computed.

Surveys by Imperial Forest Survey in the Pyinmana division.

22. During the early part of the field season Mr. Nichol devoted much of his time to selecting points for trigonometrical stations, but he was unable to complete his observations owing to the hazy state of the weather, the result being that only 5 trigonometrical points can be made use of for traverse connections.

Trigonometrical stations fixed.

23. The cost of the work up to the end of the season, as far as shown in the Forest Department accounts, was Rs. 15,829. The mileage cost rates of the work cannot be given until the traverse computations are finished.

Cost of Imperial Forest Survey and control of work.

The Survey Party was in February placed under the charge of the Pyinmana Divisional Forest Officer, who, besides being made responsible for the general conduct of the survey and for the correctness of the work done, was instructed to supply transport and rations for the party. This arrangement was a most unsatisfactory one as far as the Forest Department was concerned, as it absorbed a great deal of the Divisional Officer's time and seriously interfered with his legitimate business, especially in regard to the control of cutch-boiling in the northern part of his division. It is hoped that a responsible Survey Officer may be available for the work next season.

24. The total length of line traversed by local officers in all divisions was over 1,067 miles and the cost of these surveys was Rs. 1,039.

Surveys by local officers.

25. In the Bhamo division 22 miles of traverse, mostly along boundary lines, were carried out by Mr. Dun in the Setkala reserve at a cost of Rs. 72 and plane-table surveys of the Hakan forest, 10 square miles, Nansônti forest, 80 square miles, Mosit forest, 130 square miles, and the Indaw forest, 30 square miles, were carried out by the Divisional Officer and Ranger Maung Pon Hlaing; the length traversed has not been reported.

Surveys in Bhamo.

26. In the Katha division Messrs. Dun and Lowis, the former, assisted by a native surveyor, made a boundary survey of the greater portion of the Shweli reserves, 346 miles being traversed by Mr. Dun and 94 by Mr. Lowis at a cost of Rs. 369.

Surveys in Katha.

The Divisional Officer, Mr. O'Bryen, assisted by a native surveyor, added further details to the maps of the Mohnyin, Petsut, and Auktaw forests, and surveyed an area of 21 square miles in extension of the two latter; he also surveyed the Nankan, Pyinte, Pile, Tatlwin, Kalat, and Nami forests in the Mèza valley, aggregating 263 square miles. The cost of these surveys was Rs. 416 and the length of line traversed 465 miles.

27. In the Pyinmana division 140 miles were traversed by Mr. Carr while engaged on the demarcation of the boundaries of village-sites within the reserves. The cost amounted to Rs. 182.

Surveys by local officers in the Pyinmana division.

CHAPTER II.

MANAGEMENT OF STATE FORESTS.

I.—Regulation of management.

(*a*) *Working plans and their control.*

28. An estimate of the stock of teak in the Mu forests, based on valuation surveys, has been drawn up by Mr. Murray, which shows conclusively that no more girdling can be undertaken during the period for which the forests have been leased.

Estimate of stock of teak trees in the Mu forests.

Valuation surveys.

29. The valuation surveys executed during the year were as follows:—

	Acres.
Bhamo	205
Katha	1,580
Mandalay	216
Total ...	2,001

against 6,876 acres in the previous year.

The Bhamò and Mu Divisional Officers were engaged nearly the whole season on Forest Settlement work, and in Mandalay the Divisional Officer was only a comparatively short time in camp and had no assistant to help him in out-door work as has hitherto been the case. In Pyinmana the Deputy Conservator and his assistant were both engaged on the demarcation and survey of village lands included in the reserves, and in the Southern Shan States division the Deputy Conservator was employed on special duty in Karenni throughout the whole season.

(*b*) *Annual plans of operations.*

Annual plans of operations.

30. Annual plans of operations were prepared in all divisions and the programmes sanctioned were carried out as fully as was practicable, except in the Mandalay division, in which the outturn of work might have been better.

II.—Working of the year.

(*a*) *Communications and Buildings.*

31. The amount spent on original works was Rs. 13,181 and on repairs Rs. 3,309, of which Rs. 8,621 and Rs. 3,001 respectively were charged in the accounts of the financial year.

Full details are given in Form 51. The principal expenditure was incurred on the purchase of a bungalow for the Divisional Officer at Pyinmana and of bungalows to serve as offices and dwelling-houses combined for the Subdivisional Officers at Shwegu, Möngmit, and Kyaukse, which, with necessary additions, cost Rs. 2,757, Rs. 1,258, Rs. 2,300, and Rs. 4,000 respectively, and on the completion of the Maymyo bungalow at a total cost of Rs. 3,673, of which Rs. 2,803 were spent in the previous year. A rest-house at Taungnyo in the Pyinmana division was taken over from the Civil authorities for Rs. 600, and a rest-house was constructed at Minbyin in the same division for Rs. 200.

Improvements in roads and floating streams carried out by lessees.

32. The following improvements in roads and floating streams were carried out by lessees at their own cost:—

In the Katha division the late Mr. Darwood completed the blasting of the obstructions in the Kungyaung, rendering the stream practicable for floating.

In the Mandalay division Mr. Darwood cleared the bed of the Myittha river of snags and fallen trees, and Messrs. The Bombay Burma Trading Corporation, Limited, blasted a passage through a ledge of rocks in the Myitngè river known as the Peikgyi and removed some lesser obstructions in the same river above the Pin San ferry and at the mouth of the Babu stream.

In the Pyinmana division the lessees, Messrs. The Bombay Burma Trading Corporation, Limited, report having constructed at their own expense some 64 miles of new timber cart-tracks at a cost of Rs. 6,900 and kept in repair some 50 miles of old roads at a cost of Rs. 1,290, which included the construction of four new bridges. Rupees 9,600 were also expended by them on the improvement of floating streams.

The thittaga or boom constructed by the Corporation at the mouth of the Yônbinzaung was removed by them, as it was found that it caused the silting up of the stream as well as the annual loss of a considerable number of logs which were forced by the current under the boom and embedded in quicksands from which they could not be extracted.

(*b*) *Protection of Forests from injury.*

1.—*General protection and breaches of Forest Law.*

Breaches of forest laws.

33. Four hundred and sixty-one new cases of infringement of forest rules were reported against 212 in the previous year. The increase is partly accounted for by the three additional months included in the period under review.

The greatest increase took place in the Mandalay and Pyinmana divisions, in which the figures rose from 26 and 113 to 160 and 150 respectively. In the former the offences were principally in connection with the extraction of minor forest produce, and the increase was mainly due to the assistance in forest matters rendered by the Extra Assistant Commissioner and the police in the Pyinulwin subdivision and by the police in the Sagaing district. In the Pyinmana division the increase in offences which was not confined to any particular class is attributable to better supervision on the part of the forest establishment.

Cases tried in court and cases compounded.

34. Out of 243 cases taken into court convictions were obtained in 203 cases. The acquittals, however, include three cases in which the defendants were let off with a warning, one case in which the defendant absconded, and three cases pending from the previous year in which the trial had been put off so long that prosecution was abandoned. The true results therefore are 203 cases convicted and 33 acquitted, or 86 per cent. convicted. Seven cases were pending at the close of the year. Compensation was accepted in the cases of 540 persons compared with 465 persons similarly dealt with in the previous year. The amount accepted as compensation was Rs. 3,907.

Illicit girdling in the Bhamo division.

35. Cases of illicit girdling of teak trees have been somewhat frequent in the Bhamo division and in hardly a single instance was the offender discovered; such cases are extremely hard to detect. The girdling is generally done by Kachins employed by local traders, and it is believed at the instigation of the latter. Altogether 136 recently girdled trees were actually found in the Bhamo division as well as a large number that had been girdled during the two previous years, and probably a great many more escaped notice. Nearly all these trees were undersized.

Illicit cutch boiling.

36. Sixty-nine cases were in connection with illicit cutch boiling and of these 49 out of the 64 that were taken into court resulted in convictions. The protection afforded to cutch during the year has been altogether inadequate. At the beginning of the season, in order to prevent the forests from being overworked, the issue of licenses was restricted to a limited number of cauldrons fixed for each district approximately in accordance with its capabilities. This led interested persons to investigate the law in the matter, and it soon became generally known that the Forest Department had no power to protect trees on land not at the disposal of Government. Owing to the growing scarcity of wood for boiling the demand increased considerably and people who had not sufficient cutch to make it worthwhile boiling themselves found a ready market at Rs. 3 per cart-load for the trees growing round their fields; not only have trees of all sizes been felled, but the stumps and roots have also been extracted, thus reducing the possibility of reproduction to a minimum. Cutch is consequently being fast exterminated in private lands. A further result of a better understanding of the Forest Regulation has been the manufacture in considerable quantities for the adulteration of cutch of *than-sha* (decoction of *Terminalia Oliveri*) from trees grown on private lands.

The destruction of cutch trees would not have mattered so much if it had been confined to *bonâ fide* private property, but in many places, particularly in the Meiktila, Yamèthin, and Shwebo districts, persons claimed as private property all land that had at any time been cultivated permanently or temporarily either by themselves or their ancestors together with the adjacent forest and proceeded to boil cutch on it. Land of this class includes practically the whole of the cutch forests in these districts. Some of it is no doubt private property, but to the greater part the claimants can prove no legal title. The Forest Department has, however, before it can interfere to show in each case that the land is not private property, and it will be easily understood that with the weak staff available it has not been possible to cope with the difficulty, especially as in the cases that were successfully prosecuted the small fines inflicted (which ranged from Re. 1 to Rs. 30) have had no deterrent effect. Reservation of the cutch tracts will no doubt be the best remedy for the present state of things, but until the Controlling staff is stengthened progress in this direction must be slow.

Cutch cases reported in the Yamèthin district.

37. In the Yaméthin district 195 cases of boiling cutch on land claimed as private property but not considered to be such by the Forest Officer, were reported to the Deputy Commissioner, but owing to some misunderstanding no further action was taken. These cases have not been entered in Form No. 52, as it is not now proposed to proceed further in the matter.

2.—Protection from Fire.

38. The plantations and orchards at Bernardmyo and Mogôk in the Katha division were successfully protected from fire at a cost of Rs. 32.

Forests protected by cleared lines.

In the Mandalay division a high wind carried sparks from a jungle fire over the trace cleared round the plantation of pines and *eucalyptus* at Maymyo, and the whole 15 acres included in the trace were burnt. The amount expended in clearing traces was Rs. 105.

In the Pyinmana division the fire-protected area of the Yanaungmyin reserve was increased to 9,000 acres. Protection was carried out by burning in sections a broad belt of forest surrounding the reserve, the fire being kept in check by means of parallel cleared lines connected by cross-lines at suitable intervals. Two fires occurred in which 9 acres on the north and 36 acres on the south-west were burnt over. No damage was done as the burnt areas contained no teak. The cost of protection amounted to Rs. 743, or 1 anna 4 pies per acre actually protected.

39. Endeavours were made to protect the Ruby Mines reserves by offering rewards to villagers for putting out fires and for preventing their occurrence, but the villagers in the absence of a resident Forest Officer did not interest themselves in the matter and nearly the whole of the reserves were burnt through. The rains in this part of the district were unusually late, which was unfavourable for fire-protection. The oak coppice forest near Mogok escaped burning.

Attempts at protection by offering rewards.

Elsewhere showers fell early and extensive areas escaped fires. In Form 53 only areas have been shown for which special protective measures were undertaken.

3 — Regulation of grazing and protection from cattle.

40. As shown in Form 54 the area of reserved forests over which the right of grazing cattle has been admitted is estimated at 457 square miles, or about one-third of their total extent. Over 422 miles of this area the maximum number of cattle that may be grazed is under 6,000 head, for the remaining 35 square miles no limit as to number has been fixed. In no case is grazing allowed as a right during the dry season. In protected forests grazing is unrestricted, but the damage done by cattle is insignificant.

Areas open to grazing in reserves.

(c) Improvement of Forest growth.

1.—Natural reproduction.

41. From the Bhamo division it is reported that the reproduction of teak may be considered on the whole good, except where this tree occurs mixed with evergreen forest where it is absolutely wanting.

Natural reproduction in Bhamo.

42. In the Katha division in most parts of the Shweli range, although there has been no noticeable reproduction during the year under report, the abundant growth of young teak every where except in evergreen forest leaves little to be desired, but fire-protection is necessary in order to prevent the smaller plants from being cut back every year. In the Mèza range teak seedlings are reported to be abundant, and as the greater part of the forest escaped burning this year they will have a fair chance of establishing themselves In the Myadaung range the reproduction of pyinkado is said to be particularly good, but the contrary has been the case with cutch.

Natural reproduction in Katha.

43. Myinwa bamboos (*Dendrocalamus strictus*) have flowered in the Mandalay division in the forests in the lower portion of the Panlaung river, but the effect of the flowering on the reproduction of teak has not yet been noted.

Reproduction in the Mandalay division.

44. The Mu Divisional Officer reports that he noticed numerous well-grown teak seedlings in the portion of the Tinwa proposed reserve in which wabo bamboo (*Dendrocalamus giltonii*) had flowered in 1890-91. Cutch has as

Natural reproduction in the Mu division.

usual reproduced itself abundantly on all areas of deserted cultivation, but in tree forest the regeneration is practically nil.

2.—Artificial Reproduction.

Deserted taungyas planted in Pyinmana.

45. In the Pyinmana division nine taungya clearings aggregating 15 acres which had been made in the previous year in the Yanaungmyin reserve, were re-cleared and planted with teak, at distances of 9 feet by 3 feet. The teak plants successfully raised averaged 543 per acre equal to a density of 0·5, and the cost of the work amounted to Rs. 186 or Rs. 12-6-0 per acre. A further area of 46 acres in the Kaing and Yanaungmyin reserves was similarly treated at the commencement of the rains of 1893 at a cost of Rs. 682, but the results cannot yet be gauged.

4.—Other operations for the improvement of the growing stock.

Removal of creepers and useless trees

46. Creepers were cut wherever met with by the coolies attached to the various working parties, but except in the Bhamo division, where Rs. 239 were spent, men were not specially engaged for this work.

In the Pyinmana division Rs. 54 was spent in felling useless trees which interfered with the growth of teak in the Yanaungmyin reserve.

5.—Experiments.

Experiments, general.

47. Little was done beyond keeping up the orchards and plantations already formed and filling up blanks in the latter. The expenditure incurred during the 15 months under review was as follows:—

	Rs.
Bhamo	22
Bernardmyo	2,086
Mogôk	845
Maymyo	1,166
Total ...	4,109

Eucalyptus.

48. There are a few *eucalyptus* trees still alive at Bhamo, but they are not healthy. In the Katha division at Mogôk the plantation of *eucalyptus rostrata* made in 1890 on high ground has shown good growth, but the other species are not doing well. Blanks in the *eucalyptus leptophleba* plot were filled up with 375 *eucalyptus rostrata* seedlings from the nursery. The *E. rostrata* plantations of 1890 and 1891 at Bernardmyo have made good progress. *Eucalyptus globulus* has suffered severely from frost both at Bernardmyo and Mogôk, and with the exception of a few isolated trees in particularly favourable situations has been a failure Blanks have to a certain extent been filled up with *Pinus Khasya* seedlings from the neighbouring forest. At Maymyo in the Mandalay division about 1,000 young plants were put out, but most of them were killed by the fire, at the end of the year, including the plants of previous years, there were only 773 in all alive. There are a few plants of various species still growing at Fort Stedman and Taunggyi in the Southern Shan States, but they seem anything but thriving.

E. Rostrata.

Other exotic trees.

49. The para rubber trees at Bhamo are still doing well. The *Pinus longifolia* plantation at Mogôk has made no progress and a number of plants have died. A large number of this species were planted out at Maymyo, but the majority were killed by fire and those that were not burnt do not appear healthy. One of the four deodar plants at Bernardmyo has died and the other three show little improvement. The *cupressus torulosa* plantation is doing well and is being extended.

Fruit trees.

50. The fruit trees at Bernardmyo were manured during the early part of the rains of 1892 and have much improved. Most of the peach and nectarine trees and two apple trees fruited, the yield being 80 peaches, 70 nectarines, and 8 apples. The fruit was of good size, but owing to the wet climate most of it did not ripen thoroughly. The number of trees alive at the end of the year was as follows:—

	No
Apple trees	97
Pear trees	65
Peach and nectarine	74
Plum	9
Cherries	20
Walnuts	23

The apparent increase in numbers is due to incomplete counting in the previous year, the counting having been carried out before the jungle had been cleared. At Maymyo one of the apple trees has died, but the rest are flourishing. They failed to produce fruit as the leaves and buds were devoured by insects just at the time of flowering.

(*d*) *Exploitation of Major Forest Produce.*

2.—Selection fellings.

Girdling.

51. Teak trees have been girdled as follows:—

For Messrs. The Bombay Burma Trading Corporation ...	89
For Mr. Darwood	18
For the Mongpan Sawbwa	388
On Government account along the Mogaung Railway line...	256
Total ...	1,715

The whole of the forests in this circle leased to the Corporation have now been gone over and no further girdling can be done until the forests have in some measure recovered.

In the Katha division 185 teak trees in the Shweli reserves which had been girdled by Maung Bauk, but which were not completely dead, were regirdled; 256 trees were also girdled on the land required to be cleared for the Mogaung Railway.

In the Mandalay division 96 trees were girdled for Messrs. The Bombay Burma Trading Corporation, Limited, on the Mèhong chaung in the Myitngè forest.

In the Mu division 183 trees were girdled in the Nabè forest and 296 in the Tinwa forest for Messrs. The Bombay Burma Trading Corporation, Limited, and 66 dead trees in the former and 44 dead trees in the latter forest were marked with the girdling hammer and made over to them for extraction.

In the Pyinmana division 316 old girdled trees which had not died were regirdled for the Corporation in the Yeni forest.

In the Southern Shan States 68 trees were girdled for the Mongpan Sawbwa in the Mèsala forests east of the Salween and 315 in the forests near Namtawng on the west bank of the river. The number sanctioned was 1,000 trees, but it was found that the resources of the forest had been much over-estimated and the full quantity could not be obtained.

Licenses to fell trees other than teak.

52. Licenses which prescribed conditions in regard to the girth of the trees to be felled were issued for the following trees of species other than teak:—

Division.		Padauk and thingan trees.	Cutch trees used in boiling (estimated).	Other unreserved trees.
Katha ...	Reserved forests ...	...	...	1,685
	Protected forests ...	27	7,800	11,966
Mandalay Protected forests		5	...	235
Mu Protected forests		...	17,600	798
Pyinmana ...	Reserved forests ...	183	30,000	18,032
	Protected forests ...			
Total .		215	55,400	27,711

The above include 3,966 pyinkado trees selected and marked for felling by Forest Officers in the Katha division and 18,032 in the Pyinmana division. The selection was carried out with a view to future reproduction. As a rule only one tree in three trees was marked. The timber extracted under these licenses is included in the statement given in paragraph 59.

5.—Unregulated fellings.

Unregulated fellings, general.

53. Under this heading are comprised fellings of unreserved timber by villagers for their own use free of duty, fellings of the same trees for trade purposes in districts in which the license system was not in force during the whole year, and fellings for firewood, bamboos, and canes. The only information available is that given in paragraphs 59 and 60.

(e) *Extraction and transport of Major Produce by Land or by Water.*

1.—Timber brought out by Government Agency.

Departmental operations.

54. Extraction of timber by departmental agency was only carried out in the Bhamo and Katha divisions. Two hundred and sixty of Maung Bauk's lapsed logs containing 16,654 cubic feet mostly from the Sinkan forest in the Bhamo division were worked out by contractors at a cost of Rs. 3,803, and 343 logs of old girdled timber containing 7,621 cubic feet were extracted from the Mèza forest in the Katha division at a cost of Rs. 822. This timber with a balance of 149 logs remaining in hand from the previous year were disposed of as follows :—

	Logs.	Cubic feet.	Sale price. Rs.
Bhamo logs sold in Mandalay	169	11,688	9,204
Bhamo logs sold in Bhamo	122	6,651	1,050
Katha logs sold in Katha	400	10,872	3,694
Bhamo logs used for repairs to office ...	27	1,217	...
Lost in Bhamo division	1	77	...
Balance in hand at Katha	33	1,733	...
	752	32,238	13,948
Add on account of sale during previous year in Mu division	..	...	275
Total ...	...	...	14,223

2.—Teak timber extracted by Lessees and Contractors on payment of royalty.

Teak timber extracted by lessees.

55. The following statement exhibits the quantity of teak timber extracted between 1st April 1892 and 30th June 1893 by lessees and contractors who pay a fixed royalty per ton :—

Lessee or contractor.	Division.	Forest.	Logs.	Tons.	Revenue.
					Rs.
Bombay Burma Trading Corporation, Limited.	Mandalay ...	Pyaungshu ...	Full sized ... 3,548 Under sized ... 566	4,999 404	52,419
	Mandalay ...	Theingôn ...	Full sized .. 3 Under sized ... 1	4. ...	38
	Mu ...	Mu ...	Full sized ... 9,763 Under sized ... 4,182	11,117 2,827	1,28,127
	Pyinmana ...	Pyinmana ...	Full sized ...41,664 Under sized ... 9,936	55,510 7,807	6,01,942
Haji Mahomed Hadi ...	Bhamo ...	Mosit ...	Full sized ... 558 Under sized ... 136	782 90	8,710
Ditto ...	Ditto ...	Nansônti ...	Full sized ... 2,808 Under sized ... 766	3,619 459	46,388
Mrs.	Katha ...	Shweli ...	Full sized ... 6,048 Under sized ... 731	7,899 582	1,03,015
Mr. Darwood and U Kawi.	Mandalay ...	Hlaingdet ...	Full sized ... 387 Under sized ... 183	592 72	7,628
Nyaungywe Sawbwa ...	Katha ...	Momeit ...	569	859	4,298
Maung Sein ...	Ditto ...	Kyayatat ...	388	220	2,043
		Total ...	82,137	90,792	9,55,203

Extraction by lessees compared with previous year.

56. Compared with the previous year the quantity extracted was as follows :—

	Tons	Revenue Rs
During Financial year 1891-92	41,688	3,89,138
Ditto do 1892-93	96,683	9,53,374
During period 1st April 1892 to 30th June 1893	90,792	9,55,208
During Forest year (1st June 1892 to 30th June 1893) ...	96,592	9,59,267

The year under review was an exceptionally favourable one for floating in all divisions except Pyinmana, where the rises in the streams were somewhat below the average. More than the minimum quantity stipulated for in the contracts or leases was in all cases extracted. The penalty due on 1,816 tons short delivered from the Mogaung forests by Haji Mahomed Hadi in 1891 was remitted in consideration of the deficient rainfall of that year.

Teak timber extracted from Southern Shan States.

57. The forest revenue due from the Southern Shan States for the year 1892 was assessed according to the number of elephants employed as follows :—

	Rs.
(1) Mongpan	9,800
(2) Mawkmai	6,100
(3) Hsatung	100
(4) Kengtung	5,000
(5) Kenghkam	800
Total ...	21,800

The whole of this has been paid up together with arrears of revenue for 1891. The Mongnai Sawbwa is exempted from payment of forest revenue up to the end of 1892 and the Hsatung Chief only worked his forests for a short period.

The quantity of timber extracted from each State during 1892-93 is estimated as follows :—

	Logs.	Tons.
Mongnai	4,480	3,982
Mongpan	5,885	5,231
Mawkmai	3,000	2,667
Kengtung	3,000	2,667
Kenghkam	600	533
Total ...	16,965	15,080

Revision of rent for Southern Shan States forest.

58. The arrangements made with the Chiefs have been revised and the following sums have been fixed as the sums payable annually for rent of the forests for the four years ending 31st December 1896 :—

	Rs.
Mongnai	10,000
Mongpan	10,000
Mawkmai	7,000
Kengtung	5,000
Kenghkam	1,000

In addition to the rent, duty at the rate of 7 per cent. *ad valorem* is collected on all timber from the Shan States arriving at Moulmein, but the duty is not credited to this circle.

3.—*Timber extracted under trade licenses or brought to Revenue Stations.*

Extraction of timber by local traders.

59. The following statement shows the total quantity of timber both converted and in the log extracted under trade licenses and the revenue realized on it in the different divisions from 1st April 1892 to 30th June 1893:—

Timber and other produce.	Bhamo.		Katha.		Mandalay.		Mu.		Pyinmana.		Total.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
Teak timber, tons of 50 cubic feet ...	15,041	1,03,775	25,416	1,50,665	1,721	8,944	1,742	17,298	2,503	19,647	46,423	3,00,329
Other reserved timber, tons of 50 cubic feet.	...	...	39	270	110	922	1	34	101	1,192	251	2,418
Unreserved timber, tons of 50 cubic feet	2,895	2,892	17,632	26,259	5,793	4,051	3,247	5,412	12,353	30,517	41,920	69,131
Firewood and charcoal, tons of 120 cubic feet.	2,572	1,241	3,752	3,207	30,511	16,276	7,603	3,699	9,357	3,764	58,795	28,187
Bamboos, hundreds	4,369	1,559	62,054	16,467	31,908	6,871	30,987	5,846	3,655	859	1,32,973	31,102
Canes, hundreds	9,933	1,293	13,091	1,155	1,183	93	1,308	92	4,345	713	29,860	3,346

Local traders' extraction compared with previous year.

60. Compared with the previous year the total extraction was as follows :—

Timber and other produce.	During Financial year 1891-92		During Financial year 1892-93		From 1st April 1892 to 30th June 1893		During Forest year 1st July 1892 to 30th June 1893	
	Quantity.	Revenue.	Quantity.	Revenue	Quantity.	Revenue.	Quantity	Revenue.
		Rs		Rs.		Rs.		Rs.
Teak timber, tons ...	26,211	1,36,732	42,746	2,72,464	46,423	3,00,329	40,955	2,52,294
Other reserved woods, tons ...	48	412	191	1,784	251	2,418	237	2,321
Unreserved woods, tons ...	23,294	49,370	35,260	58,388	41,920	69,131	32,033	53,147
Firewood and charcoal, tons	27,115	10,449	49,577	23,670	58,795	28,187	57,955	25,845
Bamboos, hundreds ...	71,967	17,428	1,05,090	24,291	132,073	31,102	1,12,204	26,443
Canes, hundreds ...	7,095	742	18,401	2,126	29,860	3,346	26,834	3,026

The increase in extraction of teak timber was due to favourable floods and to the exertions made by traders to get out as much timber as possible before the 1st May 1893, the date on which the enhanced rates came into force.

Of the unreserved woods 13,709 tons were pyinkado sleepers and 28 211 tons wood of various kinds used for general purposes, the gradual enhancement in the rates for teak having created a greater demand for this class of wood. The increase in firewood and charcoal is due to the license system having been extended to wood fuel for steamers, railways, and factories, which formerly obtained their supplies free. The favourable floating season and improved arrangements for the collection of revenue account for the increase under bamboos and canes.

4.—Teak timber extracted under free licenses.

Teak timber extracted free.

61. During the 15 months under review free licenses for dead teak were issued as follows :—

Division.	Logs	Tons (estimated)
Bhamo	2,452	601
Katha	2,020	2,020
Mandalay	191	115
Mu	1,740	848
Pyinmana	1,263	682
Total ...	7,666	3,766

5.—Drift and confiscated timber.

Drift operations.

62. The balance of drift timber on hand at the commencement of the year was 149 logs, and 4,433 were salved during the period ending 30th June 1893, making a total of 4,582. Of these 1,922 were made over to claimants on payment of salvage dues, 35 were lost, and 1,713 were transferred to Government account, leaving a balance of 912, the claims to which were still pending. The revenue from drift amounted to Rs. 13,274 and the cost of the operations, including working expenses and repairs of launches, to Rs. 15,053. The apparent loss is due to the large number of lapsed logs, 1,321, that remained unsold at the end of the year.

63. Of the 4,457 logs mentioned in paragraph 63 of last year's report 2,356 logs, measuring 1,240 tons, arrived at depôts and were sold for Rs. 16,295, and 194 logs, measuring 122 tons, were launched in the Mu at a cost of Rs. 244.

Ex-Wuntho Sawbwa's confiscated timber.

6.—Export of timber.

64. Eighty-six tons of converted teak timber and one ton in the round were exported to Lower Burma on payment of export duty of Rs. 2,156 in addition to the local duty.

Exports to Lower Burma.

(f) Exploitation of Minor Forest Produce.

3.—Miscellaneous produce.

65. The revenue derived from the various items of minor forest produce during the period from the 1st April 1892 to the 30th June 1893 is exhibited below.

Minor forest produce.

Division.	Cutch.	Rubber.	Wood-oil.	Thitsi.	Resin.	Honey and wax.	Shaw fibre.	Limestone and minerals.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Bhamo ...	...	2,19,498	...	...	151	10	22	10	52	2,19,743
Katha ...	2,220	...	6	159	133	66	336	300	44	3,264
Mandalay ...	...	...	182	5	10	24	54	32	268	575
Mu ...	5,040	...	...	992	480	69	145	16	38	6,780
Pyinmana ...	3,010	...	...	379	20	8	784	48	4	4,253
Total ...	10,270	2,19,498	188	1,535	794	177	1,341	406	406	2,34,615

Only 277 licenses for cutch were issued compared with 2,826 during the previous season. In the Pyinmana division 150 licenses were issued at reduced rates under the orders of the Chief Commissioner to provide employment for people whose crops had failed.

66. The details of revenue compared with those of the previous year are as follows:—

Extraction of minor forest produce compared with previous year.

Period.	Cutch.		Rubber.		Other Minor Produce.
	Viss.	Revenue.	Viss.	Revenue	Revenue.
		Rs.		Rs	Rs
Financial year 1891-92 .. .	2,926,000	56,520	214,719	1,07,361	2,095
Financial year 1892-93 ..	277,000	10,270	205,371	1,17,403	3,788
From 1st April 1892 to 30th June 1893	277,000	10,270	341,498	2,19,498	4,847
From 1st July 1892 to 30th June 1893	273,000	10,100	295,772	1,06,635	4,128

There was a slight falling off in the quantity of rubber extracted during the financial year, but the receipts have increased owing to the enhancement of the duty from 8 annas to 12 annas per viss from the 1st January last.

CHAPTER III.

GROSS YIELD AND OUTTURN OF FOREST PRODUCE.

67. The gross yield of the forests as defined in section 93 of the Forest Department Code cannot for obvious reasons be given. The following is a summary of the net outturn of the forests:—

Summary of outturn.

How extracted.	TEAK.		OTHER RESERVED WOOD.		UNRESERVED WOOD.		FIREWOOD AND CHARCOAL.		BAMBOOS		CANES.		OTHER MINOR FOREST PRODUCE.
	Tons.	Revenue.	Tons.	Revenue.	Tons	Revenue.	Tons.	Revenue.	Hundreds.	Revenue.	Hundreds.	Revenue.	Revenue.
		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	Rs.
By Government Agency including drift	2,844	43,746	1	10	22	36	...	...	...	...	...	...	...
By lessees and contractors paying a fixed royalty per ton.	96,792	9,55,203	.	...	...	...	...	...	...	...	...	...	...
By the Chiefs of the Southern Shan States.	15,080	28,500	...	...	...	...	...	.	...	...	...	...	...
By consumers and purchasers ...	40423	3,02,485	251	2,418	41,920	69,131	57,880	27,912	182,973	31,102	29,860	3,346	2,34,615
By right-holders	...	...	...	...	...	...	915	275	...	...	...	...	...
By free grantees	3,766	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	164,905	13,29,934	252	2,428	41,942	69,167	58,795	28,187	182,973	31,102	29,860	3,346	2,34,615

CHAPTER IV.

Financial Results.

Financial results, general.

68. The revenue and expenditure of the financial year 1892-93 compared with that of the four preceding years was as follows:—

	Revenue.	Expenditure.			Surplus.
	Rs.		Rs.	Rs.	Rs.
1888-89	10,62,158	A 4,45,117 B 93,522		5,38,639	5,23,519
1889-90	14,45,864	A 49,854 B 1,19,031		1,68,885	12,76,479
1890-91	13,25,069	A 57,806 B 1,34,159		1,91,965	11,33,104
1891-92	9,23,999	A 80,319 B 1,77,635		2,57,954	6,66,045
1892-93	15,55,533	A 81,735 B 1,98,134		2,79,869	12,75,664

The revenue and expenditure for the period 1st April 1892 to 30th June 1893 was—

Rs.		Rs.	Rs.	Rs.
17,27,115	A 1,04,143 B 2,47,236		3,51,379	13,75,736

And that for the forest year 1st July 1892 to 30th June 1893:—

Rs.		Rs.	Rs.	Rs.
15,84,028	A 94,092 B 1,94,725		2,88,817	12,95,211

In the above table the expenditure for the years 1888-89 to 1891-92 includes only a proportion of the expenditure incurred by the Direction Division, the remainder being debitable to the Western Circle.

Revenue compared with previous years.

69. The following statement exhibits the revenue of each of the last four financial years grouped according to the principal sources from which it is derived, as well as the revenue for the periods 1st April 1892 to 30th June 1893 and 1st July 1892 to 30th June 1893.

Source of Revenue.	Financial year.				Period.	Forest year.
	1889-90.	1890-91.	1891-92.	1892-93.	1st April 1892 to 30th June 1893.	1st July 1892 to 30th June 1893.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Revenue on timber worked out by Government Agency.		87,719	88,882	6,522	14,223	12,518
Revenue paid by lessees (including rent paid by Shan Chiefs).	11,32,963	9,11,871	3,95,138	9,81,874	9,83,703	9,72,317
Revenue on reserved timber worked out by local purchasers.	1,62,485	1,60,208	1,48,333	2,76,391	3,04,903	2,56,502
Revenue on unreserved timber worked out by local purchasers.	4,532	12,240	49,370	58,388	69,131	53,147
Revenue on firewood ...	11,090	14,567	10,449	26,670	28,187	25,845
Revenue on bamboos	19,096	21,699	17,428	24,291	31,102	26,448
Revenue on cutch	17,100	33,060	56,520	10,270	10,270	10,190
Revenue on India rubber ...	78,799	1,04,497	1,07,364	1,17,403	2,19,498	1,66,635
Revenue on other minor forest produce.	2,166	4,104	3,487	5,914	8,193	7,154
Revenue on drift and confiscated timber.	4,711	9,248	35,140	27,550	29,569	29,283
Miscellaneous revenue	12,422	15,856	11,932	28,260	28,336	24,044
Total ...	14,45,864	13,25,069	9,23,999	15,55,533	17,27,115	15,84,028

The fall in revenue from timber brought out by Government Agency is due to the greater part of Maung Bauk's lapsed neaped timber having been brought out during the previous year. Several contracts have been given for working out old girdled trees, but the results have not yet become apparent.

The increase under miscellaneous revenue was partly due to the sale of five elephants to the Police Department. The other items have already been explained in Chapter II.

Expenditure compared with that of previous year.

70. For the reasons given in paragraph 68 it is difficult to make a detailed comparison of the expenditure of the year under review with that of the previous year. Taking approximate figures, however, there was in the year under review an increased expenditure amounting in all to Rs. 6,000, under heads AI, AII, and AIII, which refer to the extraction of timber, an increase of Rs. 5,000 under each of the heads "Purchase of elephants," and "Buildings," and an increase of Rs. 14,000, under AVIII, chiefly on account of the Imperial Forest Survey operations; on the other hand, there was a less expenditure of Rs. 29,000 under Refunds. Under B., Establishments, there was a total increase of Rs. 15,000. The pay of Conservators and superior officers was Rs. 3,000 less than in the previous year, but there was an increase of Rs. 6,000 on account of subordinate Forest and Depôt establishments, Rs. 6,000 on account of Office establishments, Rs. 1,000 on account of special allowances, and Rs. 5,000 on account of travelling allowances.

Financial results of each division.

71. The financial results taken division by division are given below.

Division.	Financial year 1892-93.			Period 15 months April 1892 to June 1893.			Forest year July 1892 to June 1893.		
	Revenue.	Expenditure.	Surplus.	Revenue.	Expenditure.	Surplus.	Revenue.	Expenditure.	Surplus.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Bhamo	2,78,834	46,573	2,32,261	4,00,806	55,254	3,45,552	3,30,262	42,625	2,87,637
Katha	3,05,690	69,448	2,36,242	3,27,727	84,784	2,42,943	2,98,149	74,560	2,23,589
Mandalay ...	94,959	50,245	44,714	1,04,170	65,637	38,533	97,640	52,241	45,399
Mu	1,81,959	27,805	1,54,154	1,88,473	36,518	1,51,955	1,75,563	28,522	1,47,046
Pyinmana ...	6,58,775	62,530	5,96,245	6,70,392	80,642	5,89,750	6,56,860	68,741	5,88,119
Southern Shan States	28,790	23,268	5,522	28,790	28,544	246	19,133	22,128	—2,995
Direction	6,526	...	6,526	6,757	...	6,757	6,416	...	6,416
Total ...	15,55,533	2,79,869	12,75,664	17,27,115	3,51,379	13,75,736	15,84,023	2,88,817	12,95,211

CHAPTER V.

FOREST ADMINISTRATION.

Revision of Forest Rules.

72. The Upper Burma Forest Rules have been revised throughout, the principal modifications introduced being the enhancement of the local duty on teak timber, the cancelment as regards unleased forests, of the rule prohibiting the export of teak timber in the log, the extension of the license system to all timber worked out for trade purposes, including firewood, the enhancement of the rates for cutch-boiling licenses, and the amendment of the rules regulating the extraction of minor forest produce and the transport of timber by river or rail.

Divisional charges and transfers of officers.

73. Mr. E. S. Carr, Deputy Conservator, proceeded on furlough on the 16th May 1892, and was succeeded in the charge of the Katha division by Mr. E. A. O'Bryen. The latter was absent on 3½ months' privilege leave from the 9th July 1893, Mr. McHarg, Assistant Conservator, who was transferred from the Tenasserim Circle, holding charge in the mean time. Mr. J. Copeland, Deputy Conservator in charge of the Pyinmana Division, was granted furlough on the 9th June 1892 and was relieved by Mr. C. E. Muriel, Deputy Conservator, who was transferred from the Western Circle. Mr. Palmer, Deputy Conservator, who was in charge of the Bhamo division, was granted 3½ months' privilege leave from 8th July 1892, and on his return was transferred to the Western Circle. He was relieved by Mr. Dun, Assistant Conservator, who held charge of the division until the 23rd November, when he was succeeded by Mr. McHarg. The Mandalay division remained during the whole year under the charge of Mr. Calthrop, Deputy Conservator, and the Southern Shan States under the charge of Mr. Jackson. The latter officer was, however, deputed for special duty in Karenni under the Foreign Department in connection with timber disputes with Siam from the 3rd of November 1892 to the 14th April 1893, and his services were thus lost to the circle for practically the whole of the working season. Mr. Calderwood, Extra Assistant Conservator, was transferred from the Mandalay subdivision to the Western Circle on the 2nd March 1893 and was succeeded by Mr. Kavanagh, Extra Assistant Conservator, from the Western Circle. Mr. Lane Ryan, Extra Assistant Conservator, returned from the Forest School on the 5th May 1893, and was posted to the Myittha-Panlaung subdivision of the Mandalay division.

Services of Gazetted Officers.

74. With few exceptions Gazetted Officers have worked with zeal and ability, and the Conservator would specially bring to notice the successful management of their divisions by Messrs. Murray, Muriel, and O'Bryen. Mr. McHarg has made good progress in organizing the Bhamo division during the short time he has been in charge, and Mr. Dun has turned out an excellent record of demarcation work. Good work of a similar nature was also done by Messrs. S. Carr and Lowis. The former, however, was laid up with fever for nearly two months in the beginning of the season and the work of the latter was much delayed for want of an escort.

Services of the Subordinate establishment.

75. The Subordinate Forest establishment has on the whole worked well and Forest Rangers Maung Po Thin in the Katha division and Maung At in the Pyinmana division have been specially commended by their Divisional Officers. The strength of the lower controlling staff was increased in May 1893 by the appointment as temporary Forest Rangers of Messrs. C. S. Rogers and D. H. Allan, passed students of the Dehra Dun Forest School, and Mr. Rencontre, a temporary Forest Ranger, was deputed to the school for a 2-years' course of instruction. Great difficulty is still experienced in obtaining Burman recruits for the Provincial Forest Service.

Cost of Forest establishment.

76. The cost of the permanent and temporary Forest and Depôt establishment compared with that of the preceding year was as follows:—

	1891-92.	Financial year. 1892-93.	1st April 1892 to 30th June 1893.	1st July 1892 to 30th June 1893.
	Rs.	Rs.	Rs.	Rs.
Permanent.				
Forest and Depôt, B. I. C. ...	23,129	23,656	30,213	24,523
Temporary.				
Forest and Depôt, B. I. C. ...	2,543	7,646	10,320	8,985
AII ...	...	2,358	3,195	2,987
AIII ...	...	158	158	158
Total ...	25,672	33,818	43,886	36,603

Clerical establishments.

77. The Conservator's Office establishment superintended by Mr. Johnson has worked well, and Divisional Officers have generally expressed themselves satisfied with the work of their offices. The establishment is, however, in many cases insufficient for the growing work of the Department, and it has not always been possible to secure suitable men at the rates of pay sanctioned.

Health of Officers.

78. The health of gazetted officers has been fair, though nearly all suffered more or less from fever. That of the subordinate establishment has not been good. One Forest Ranger had to be permanently invalided, two foresters and one guard died from the effects of fever, and several officers have had to take leave.

GENERAL REMARKS.

Steam launches.

79. The steam launches *Ranger* and *Forest Guard* were employed throughout the year in the Bhamo, Katha, and Mandalay divisions on drift and revenue work on the Irrawaddy.

Elephants.

80. At the end of last year there were 43 elephants and one calf on the books of the Upper Burma Forest Department. Sixteen of these animals were made over to the Western Circle on its formation, leaving 27 and the calf. In the Eastern Circle, one animal, which has been lost since January 1891, was written off, one, a tusker, was killed by a musth elephant, and two animals died natural deaths. Two new animals were purchased at a cost of Rs. 2,500 and one calf was born, leaving 25 full grown animals and two calves on the books at the close of the year.

Miscellaneous notes.

81. A large carved teak doorway was made in Mandalay at a cost of Rs. 450 and sent to the Chicago exhibition.

A sample log of kôkko (*Albizzia Lebbek*) wood and about four gallons of kanyin (*Dipterocarpus lævis*) oil collected departmentally were supplied to the Reporter on Economic Products to the Government of India.

Twenty logs of baing, a soft wooded tree common in the Katha division, were made over to Messrs. The Irrawaddy Flotilla Company for experimental manufacture into kerosine oil cases. The wood did not prove particularly suitable, and the boxes made from it could not compete with those made in Lower Burma.

Some small quantities of tamalan (*Dalbergia sp.*) were supplied to the Mandalay Jail. The wood of this tree is very tough and does not split readily. It has been employed for carriage shafts and furniture, but its great hardness is likely to prevent its coming into general use.

J. W. OLIVER,
Conservator of Forests,
Eastern Circle.

MANDALAY:
The 29th September 1893.

REPORT

ON

FOREST ADMINISTRATION

IN

THE WESTERN CIRCLE

For the year 1892-93,

BY

A. L. HOME, ESQUIRE, CONSERVATOR OF FORESTS, WESTERN CIRCLE

INTRODUCTION.

Formation and organization of circle.

THIS circle was formed in April 1892, when Mr. T. H. Aplin, Deputy Conservator, was appointed to officiate as Conservator in charge; he was relieved by the writer of this report on the 28th October. It originally consisted of three divisions, Chindwin, Yaw, and Minbu, and of one subdivision, Magwe, in the Minbu division. At the close of the period under report it consisted of four divisions, the Chindwin having been divided into the Upper and Lower, and of four subdivisions, the additions being Paungbyin in Upper Chindwin, Mingin in Lower Chindwin, and Gangaw in the Yaw division; the number of revenue stations has been increased from 5 to 9. The area of reserved forests has risen from 239 to 822 square miles, and proposals for additions aggregating 385 square miles were gazetted during the year; the (computed) area of protected forests is increased from 10,594 to 15,393 square miles.

CHAPTER I.

EXTENSION AND CONSTITUTION OF STATE FORESTS.

1.—*Alteration of Area.*

Reserved forests.

2. The following additions have been made to the area of the reserved forests:—

Division.		Sq. miles.	No. and date of Notification.
Upper Chindwin	Kindat	123	1 of 4th January 1893.
	Ahlaw	49	167 of 2nd May 1893.
Minbu	Sadon	92	440 of 8th December 1892.
	Sunchaung	92	441 of 8th December 1892.
	Yabè	42	45 of 3rd February 1893
	Nwamadaung	36	217 of 20th June 1893
	Môn West	95	218 of 20th June 1893
	Pazu chaung	15	219 of 20th June 1893
	Tôkto chaung	8	220 of 20th June 1893
	Tichaungwa	19	221 of 20th June 1893
	Paungchaung	12	222 of 20th June 1893
	Total	583	

At the close of the year the total area of forests finally reserved is 822 square miles, of which 19 square miles are subject to taungya privileges by 125 persons and their descendants. The privilege has in all cases been granted subject to the condition that no cutch trees or trees of the reserved kinds are destroyed in the areas cleared for cultivation, and in 8 square miles in the Môn West reserve there is, in addition, a condition that the areas cultivated shall be planted up with teak or cutch at the option of the Divisional Forest Officer.

Protected forests.

3. There were again many alterations in the estimated area of protected forests in the several divisions, which stands at 15,393 square miles as compared with 10,594 square miles at the commencement of the year. The chief increases are in the Upper Chindwin and the Yaw divisions, in the former owing to additional areas examined in the course of girdling operations and information obtained of forests that have not been yet examined, and in the latter owing partly to transfers from the Lower Chindwin division and partly to a more carefully prepared estimate of the areas that come under the operation of the Forest Rules. The former estimate of the areas in the Minbu division has not been revised.

Forests examined.

4. The following are brief notes on forests examined during the year:—

Upper Chindwin Division.—The areas girdled over in 1888 by Messrs. The Bombay Burma Trading Corporation, Limited, without supervision in the Yu and Ahlaw forests were inspected by Mr. Bruce, who reports that he found every marketable tree, whether in a group or a single tree, that was sound had been killed. None of this timber has yet been extracted, and unless operations are commenced at once the valuable trees will be burnt, as forest fires occur annually and there is much dry fallen wood in these forests.

The Nankamu forest was once extremely rich in teak, but it has been almost destroyed by reckless girdling and ya-cutters; the Kanti stream was the only one in which girdling was found possible.

The Chaungyi, Naukadin, Nantainkwin, and Nanpaman forests are described as primeval forests, very rich in teak in their more inaccessible portions, but otherwise the three first have been very much damaged by ya-cutters. The Nanpaman forest is a forest of pure teak on flat ground for a width of about 2 miles, trees of all ages being well represented, every tree being tall, straight, and well grown; the stream, however, is small and winding, and timber could not be floated out. It is estimated that proposals for selected areas from these forests of about 300 square miles will be submitted with the view to their reservation.

5. *Lower Chindwin Division.*—The Kanni forests contain cutch in scattered patches along the foot of the Mahudaung hills, but reproduction is indifferent.

The cutch-producing areas on the feeders of the Maw river are very rich, and reproduction is generally good. These forests, which now form part of the Yaw division, will be carefully examined with the view to taking up reserves.

The cutch forests drained by the Yama outside the proposed reserve are in some parts good and have not yet been visited by cutch-boilers. Reproduction is fair.

The Mahamyaing teak forests were examined by Mr. Thompson, Assistant Conservator. They are estimated to cover about 350 square miles, and the teak-bearing portion may be roughly described as a plateau with an average altitude of 1,800 feet, on which, though there is much dense evergreen jungle, water is found only in a few scattered water-holes during the dry season. It is around these that teak is most plentiful in the area examined, but the richest teak-bearing areas on the plateau are said to be situated to the north-east, where there is no water during the working season and which were not on that account visited. The countings show a very large number of unsound trees in the mature stock, in some parts amounting to 67 per cent., and of standing girdled trees about that percentage are estimated to be inferior in quality.

The cutch tracts on the Lower Myittha, situated on the banks of the Myittha and Nankathè streams, grow chiefly on alluvial soil, and are very rich, in some parts pure. Reproduction is excellent and small areas will be selected as reserves, which, if properly regulated, are capable of giving a good sustained yield.

The forests on the Nwa chaung, a feeder of the Myittha, were further examined, and were found to contain teak up to an altitude of about 2,500 feet; the lower forests were girdled in 1890, when 270 trees were obtained, but the more remote portions were left untouched. Proposals for reserving about 68 square miles will shortly be submitted.

6. *Yaw Division.*—The teak forests on the Kyaing and Dandi chaungs, feeders of the Kyi stream, in which girdling was carried out, were found to contain both teak and cutch, and the former were plentiful and well grown. Towards the east watershed of the Kyaing chaung the trees are of great girth with long boles free of branches. Natural reproduction is bad, owing, it is believed, to fires and other injuries common to open forests.

7. *Minbu Division.*—The country along the Yomas from Ngapè to Aung was examined by Mr. Palmer, who reports the results to be generally very poor. One tract of about 144 square miles, south of the Môn West reserve, will be proposed for reservation, containing teak and cutch; the latter flourished formerly and the forests are said to bear evidence of having at one time contained magnificent cutch trees.

An area of about 15 square miles south of the Nwamadaung forest reserve was found well stocked with young cutch trees, and proposals for its reservation are awaited.

In the Magwe district a good deal of young cutch has been found in the waste lands of the Pin and Natmauk townships, and countings will be made next season with the view to their reservation.

2.—*Forest Settlements.*

Areas awaiting and under settlement.

8. The areas awaiting and under settlement at the close of the year are as follows:—

Division.	District.	Name of forest.	Notified before 1892-93.	Notified during 1892-93.	Total of each division.	No. and date of notification.
			Sq. miles.	Sq. miles.	Sq. miles.	
Upper Chindwin.	Upper Chindwin.	Yu	193	...	193	89 of 19th February 1893.
Lower Chindwin.	Upper Chindwin.	Taungdwin ...	262	...	869	161 of 23rd November 1888.
		Bôn	114	...		222 of 11th December 1890.
		Kyaukka ...	...	32		123 of 10th April 1893.
		Labin	...	40		
		Tan	...	20		
		Wayè	...	22		
	Lower Chindwin.	Patolôn ...	40	...		78 of 11th April 1891.
		North Yama ...	119	...		10 of 21st January 1892.
		East Patolôn ...	...	220		370 of 25th October 1892.
Yaw ...	Pakôkku	Laungtaung ...	96	...	691	10 of 8th January 1891.
		Kunzè	116	...		11 of 8th January 1891.
		Kyauksit ...	172	...		274 of 25th November 1891.
		Kyaw	284	...		11 of 21st January 1892.
		Pindaung ...	22	...		
		Pindaung Extension	...	15		244 of 19th August 1892.
		Man	...	36		316 of 29th September 1892.
Minbu ...	Magwe ...	Kyaukmigyaung ...	28	...	179	240 of 13th October 1891.
		Kinmuntaung ...	49	...		
		Yinmalè ...	17	...		
		Ngaminchaung ...	85	...		
		Total ...	1,547	385	1,932	

Of the total area of proposed reserves, enquiries into 1,133 square miles have been completed by Settlement Officers as shown below, and these areas are practically ripe for final reservation.

The total cost of settlements for the 15 months is Rs. 2,701, of which Rs. 2,506 are charged in the Forest Accounts, including Rs. 141 erroneously debited to "Demarcation," and Rs. 195 in the Civil Accounts.

Areas enquired into by Forest Settlement Officers.

9. Lieutenant H. N. Warde, Assistant Commissioner, was appointed Forest Settlement Officer and completed the enquiries into the following proposed reserves:—

District.	Forest.	Sq. miles.
Pakôkku ...	Kyaw	234
	Pindaung	22
	Pindaung Extension	15
	Man	36
	Total ..	307

He also partially enquired into Kyauksit reserve (172 square miles), but as the boundary of the area settled remains undefined, the work will practically have to be done over again.

Enquiries into the following proposed reserves were completed by Mr. H. G. Sharpe, Assistant Commissioner, who was appointed Settlement Officer in February 1893:—

District.	Forest.	Sq. miles.
Lower Chindwin ...	North Yama	119
Pakkôku ..	Laungtaung	96
	Kunzè	116
	Total ..	331

It is reported that Lieutenant G. E. T. Green, Assistant Commissioner, almost completed the settlement of the Yinmalè proposed reserve, Magwe district, before he closed work for the season 1891-92, and the original papers are said to be with the Deputy Commissioner, Magwe.

The proceedings concerning the Yu proposed reserve (198 square miles), enquired into in 1890-91, and the Patolôn (40 square miles), which was settled during the year under report, were with Government at the close of the year, with draft notifications for approval; those regarding the Taungdwin reserve (262 square miles) reached the Conservator in June, and are at the time of writing this report before the Chief Commissioner.

The settlement proceedings of the Bôn proposed reserve are reported to be missing from the office of the Deputy Commissioner, Upper Chindwin district.

3.—*Demarcation.*

Demarcation in Upper and Lower Chindwin and Yaw divisions.

10. The officers in the Upper and Lower Chindwin and in the Yaw divisions had their time entirely engaged during the working season in girdling, examining new forests, and assisting the Forest Settlement Officers; hence no final demarcation was done in these divisions This is not of such great importance as it may seem, as the preliminary demarcations are well defined and the settlement papers contain ample details for the guidance of officers who will lay down the final boundaries. It is probable that next season also there will be very little demarcation work done in any of the divisions in this circle, as the time of four officers will be entirely taken up in girdling for Messrs. The Bombay Burma Trading Corporation, Limited, in the Upper and Lower Chindwin divisions, and the Yaw Divisional Officer will also be partially employed on that work. One officer only will, it is expected, be on duty in the Minbu division. The extraordinary increase in the value paid for cutch licenses for next season renders it absolutely necessary that officers of the controlling staff must devote more of their time to the inspection of the workers in this industry.

Demarcation in Minbu division.

11. The final demarcation of the Sadon, Sunchaung, and Yabè reserves was taken in hand. That of the Sadon reserve is reported by Mr. Palmer to have been "completed," but the only complete work done is the erection of 53 posts and mounds along 13 miles of the southern boundary; along the remaining 19 miles that must be demarcated, the points at which 202 posts will be erected were laid down on the ground On the boundaries of the Sunchaung reserve the places at which 321 posts along 32 miles of the boundary will be erected were marked off, and on those of the Yabè reserve the positions of 233 posts on 22 miles were fixed.

The total work done therefore in the Magwe reserves is the final demarcation of 13 miles, and the settling of the position of the boundary posts along 73 miles, the whole 86 miles being blazed and the standing trees hammer-marked in the centre of the blaze.

The expenditure incurred on demarcation is Rs. 2,674. Of this Rs. 580 were expended in the Yaw division in the purchase of iron tablets; Rs. 2,094 are charged in the accounts of Minbu division, of which Rs. 1,323 are the cost of iron tablets, and Rs. 771 were actually expended on the 86 miles taken in hand.

4.—*Surveys.*

Surveys and maps.

12. Except in the Upper Chindwin division the work done was considerably less than in the previous year, as the time of officers in the Lower Chindwin and Yaw divisions was much taken up with Forest Settlement work, and in Minbu a large area was in the hands of dacoits. The expenditure on surveys and on working plans, both of which were included under one head till near the end of the year, was Rs. 3,495.

Lithographed maps of the following forests were printed locally:—

Division.	Forest.	Scale.	Area. Sq miles.
Lower Chindwin ...	Patolôn	1″ = 2 miles	40
	East Patolôn	Do.	220
	Kyaukka	Do.	82
	Labin	Do.	40
	Tan	Do.	20
	Wayè	Do.	22
Yaw ...	Pindaung Extension	1″ = 1 mile	15
	Man	Do.	36
Minbu ...	Pazu chaung	Do.	15
	Tôkto chaung	Do.	8
	Tichaungwa	Do.	19
	Paungchaung	Do.	12
		Total	479

Surveys in Upper Chindwin division.

13. Mr. Bruce traversed 170 miles of linear survey in the course of his girdling on the Naukadin, Nantainkwin, and Nankamu streams and their feeders in the Upper Chindwin and Katha districts, but unfortunately, with the exception of the papers relating to 25 miles in the Nankamu, all papers were burnt in the fire that destroyed the Forest office at Kindat. He reports, however, that he has from notes been able to compile maps totalling an area of 250 square miles.

Mr. Forteath surveyed with compass and plane-table over 168 miles, and has mapped an area of 450 square miles of country on the Chaungyi stream and its feeders in the Upper Chindwin and Katha districts.

Surveys in Lower Chindwin division.

14. Mr. Aplin, with the assistance of Mr. Anthony, Forest Ranger, made traverses over 158 miles in the country from Nyaungbinle in the Kanni township, to near the borders of the Pakôkku district. These operations extended over an area of 37 miles long by some 12 miles broad in places, but do not give sufficient data from which to prepare a reliable detailed map.

Mr. Thompson carried out surveys in the Mahamyaing, in the Lower Myittha cutch tracts, and in the Nwa forests, from which it is stated that maps have been prepared. Traverses were carried out over 102 miles only in all, and the results on paper can at best be but sketch maps with little interior details of the 445 square miles of country examined.

Surveys in Minbu division.

15. About 112 square miles of country are reported to have been surveyed in the Minbu district, south of Padeng, but these forests have not been inspected by the Divisional Officer as that part of the district was practically in the hands of dacoits. In the Magwe district the results of 87 linear miles of reserve boundary surveys are reported to have been recorded on maps by Mr. Burn-Murdoch.

CHAPTER II.

MANAGEMENT OF STATE FORESTS.

I.—Regulation of management.

(*a*) *Working plans and their control.*

Valuation surveys.

16. Data as to growing stock was collected by valuation surveys, detailed in Appendix C, over the following areas:—

	Acres.
Upper Chindwin division	980
Lower Chindwin division	2,425
Minbu division	1,391
Total ...	4,796

as against 2,759 acres in the previous year.

Upper Chindwin division.—Valuation surveys were made over 980 acres in all the forests in which girdling was carried on, and in some of the forests on the Nankamu that were examined by Mr. Forteath after the girdling had closed. Particulars regarding these latter, however, the Conservator regrets to say, are not forthcoming.

Lower Chindwin division.—The valuation surveys made by Mr Aplin in the forests in Kanni and North Yama over 780 acres served as a basis for fixing the number of cauldrons for which cutch licenses could be issued in 1893-94. The results show the previous figures on which the safe annual outturn of these forests was based to have been totally untrustworthy.

Mr. Thompson carried out valuation surveys over 803 acres in the cutch forests of the Lower Myittha, which comprise the forests near the mouth of the Nankathè chaung (or Manipur river) and along the bank of the Myittha, which were found to be particularly rich and are estimated to be able to allow of the annual sale of licenses for 51 cauldrons.

He also surveyed over 608 acres in the Mahamyaing teak forests on the east of the Chindwin and 284 acres in the forests drained by the Nwa chaung, a tributary of the Myittha.

Yaw division.—The Divisional Officer was not able to carry out valuation surveys this year, as he had to hurry through his girdling, and the rest of the year he was employed with the Forest Settlement Officer laying down proposed reserve boundaries.

Minbu division.—Valuation surveys were made over 1,391 acres, the results of which are shown in Appendix C.

(*b*) *Annual plans of operations.*

Deviations from sanctioned plans of operations.

17. The plans for each division have been generally adhered to.

Upper Chindwin division.—The girdling instructions were unfortunately misunderstood, and instead of 23,555 tons being girdled during the season under report, as was intended, work was stopped in the higher branches of the Chindwin when 21,181 tons had been girdled. It was expected that the balance would be obtained in the Nankamu, but, owing to the poverty of the forests, the complete year's girdling was 22,456 tons, or 1,099 tons short.

Yaw division.—The final settlement of the Kyauksit reserve was not completed by the Forest Settlement Officer.

Minbu division.—The final demarcation of the Magwe reserves, Sadôn, Sunchaung, and Yabè, which should have been completed, has made very little progress, and the settlement of the Kyaukmigyaung, Kinmuntaung, Yinmalè, and Ngaminchaung proposed reserves, which would, it was expected, have been taken in hand, still remains to be done, as the Forest Settlement Officer found the work in the Yaw division more than he could carry out in the season.

II.—Working of the year.

(*a*) *Communications and Buildings.*

Expenditure on roads and buildings.

18. The expenditure during the 15 months under report is classed as follows :—

	Buildings.	Roads.	Total.
	Rs.	Rs.	Rs
New works	6,789	28	6,817
Repairs	1,395	108	1,503
Other works	795	...	795
Grand Total ...	8,979	136	9,115

This classification does not agree with the Comptroller-General's 15 month's figures, as he takes Rs. 32 under "Buildings" instead of "Other Works."

Improvement of floating streams.

In the Lower Chindwin division it is reported that blasting operations for the improvement of the floating of logs in the Gyit and Satha chaungs in the Yama forest, and in feeders of the Patolôn and Taungdwin chaungs, were undertaken by the agents of Messrs. The Bombay Burma Trading Corporation, Limited, and that about Rs. 3,500 were expended by them on these works.

New works and repairs.

19. The new works and repairs include the following principal items. The expenditure on roads was on clearing tracks, chiefly to make them passable for elephants ; that on "other works" for fencing and clearing compounds :—

Upper Chindwin division.—Ranger's house at Maw, Rs. 1,000 ; Depôt Forester's house at Kindat, Rs. 450 ; out-houses at Kindat, Rs. 250; repairs to headquarters bungalow, Kindat (since burnt down), Rs. 518.

Lower Chindwin division —Additions to headquarters bungalow and out-houses, Mônywa, Rs. 412 ; depôt house and out-houses, Alôn, Rs. 656 ; Mingin subdivisional headquarters bungalow (in part), Rs 1,928 ; repairs, headquarters bungalow, Mônywa, Rs. 218.

Yaw division.—Depôt house, Pakôkku, Rs. 299 ; Ranger's house, Pauk, Rs. 500 ; rest-houses at Kabaing and Wabin, Rs. 385 ; repairs, headquarters bungalow, Pakôkku, Rs 169.

Minbu division.—Depôt and rest-houses at Minhla, Zigat, Thikkemyaung, and Sedaw, Rs. 657 ; durwan's hut, Minbu, Rs. 160 ; servants' quarters and small office, Taungdwingyi, Rs. 80 ; repairs, headquarters bungalows, Minbu and Taungdwingyi, Rs. 474

Destruction by fire of the Forest Office building at Kindat.

20 The Forest house, which served as a residence and office for officers of the Upper Chindwin division at Kindat, was burnt to the ground on the 15th April 1893 under circumstances that indicate incendiarism, but the police have not been able to bring the offenders to justice. The whole of the records of the division and the personal effects of the officers were lost in the fire, including the accounts for March and Mr. Bruce's maps, which latter had been in the hands of Mr. C. W. B. Anderson, Extra Assistant Conservator, for the purpose of copying for some weeks.

(*b*) *Protection of Forest from injury.*

1 —General protection and breaches of Forest Law.

Cases before the Courts.

21. In the divisions that now form this circle there were 13 cases pending from last year, 175 new cases were reported, 185 cases were disposed of, and 3 remain pending at the year.

The new cases of the previous year were 159, but the record of the present year is incomplete, owing to the papers of the Upper Chindwin division having been destroyed by fire, and among them the files of all cases enquired into by the Divisional Officer during the girdling season, which included over 200 cases of felling green teak.

In the courts 68 cases were disposed of, of which 56 (161 persons) resulted in convictions and 12 (25 persons) in acquittals; the convictions therefore are 82·3 per cent. of the cases disposed of.

The cases before the courts under "other offences" are thus classified :—

One using license after expiry, fined Rs. 2.
One passing revenue station, fined Rs. 30.
One affixing mark on timber, 3 months' imprisonment.
One unlawfully taking revenue on timber, 9 months' imprisonment.
One using sawpit without license } not stated.
One transferring license without sanction }
Two Minbu cases not specified, acquitted.

Cases compounded.

22. The 117 cases dealt with by Divisional Officers under section 62 of the Upper Burma Forest Regulation are classified as follows :—

	Compensation accepted.
	Rs. A. P.
105 unauthorized fellings, &c.	3,051 9 0
1 using license after expiry	1 12 0
11 passing revenue station	122 0 0
Total ...	3,175 5 0

The report as regards cases compounded in the Upper Chindwin division is incomplete, as all papers were burnt in April The figures in the returns do not therefore give a true record of the offences reported during the year.

Felling green teak.

23. There is no doubt that the forest rules are practically a dead letter in the more remote portions of the Upper Chindwin, where that district joins with Katha, as regards the protection afforded to green teak. The rules are in force there as in the rest of the circle, but, owing to the enormous area and the small establishment employed, the only real protection that can be afforded is such as can be enforced by the help of the Civil authorities. In this matter Mr. Porter, the Deputy Commissioner at Kindat, has already given all the assistance in his power by issuing strict orders to his subordinates, and it is hoped that similar assistance will be given by the Deputy Commissioner of Katha.

At the request of the persons concerned 66 cases of felling teak without a license were compounded; in Upper Chindwin 30 and in Lower Chindwin 36. This was done as it was not desired to be hard on the offenders, who were thankful to get off the (to them) additional punishment of having to leave their villages and attend the courts.

Selling timber granted free.

24. In the Lower Chindwin division the case pending from the previous year resulted in the accused being found guilty of selling teak timber granted under a free license; he was fined Rs. 150 and the three logs were confiscated.

Case under Penal Code.

A case was also sent up for disposal by the Deputy Commissioner under the Indian Penal Code in which a woman took out licenses for working thityâ bark in the names of four men, and proceeded to levy 8 annas per cart-load as the monopolist from all men from the Pakôkku district who were collecting the bark; she was, on conviction, fined Rs. 50.

Cutch cases.

25. The divisional reports (except Lower Chindwin) give very few details of cutch cases, and in the Minbu division one case only is specially reported, in which a man was fined Rs. 50 for boiling cutch on so-called *bobabaing* land. In all 16 cases only are reported to have been dealt with by the courts, the punishments varying from the maximum of one month's imprisonment and a fine of Rs. 50 in the Lower Chindwin to the minima of fines of Rs. 2 to Rs. 10 each in the Myingyan district, besides the confiscation of all cutch and utensils, &c., found. In the Lower Chindwin division 12 licenses were confiscated for the breaches of their conditions as regards boiling only in one cauldron, and one for cutting undersized trees. No cases of adulteration of cutch were reported.

That there is a vast amount of unauthorized cutch-boiling there is no doubt. It is satisfactory that in some districts the police have commenced to report such cases under orders issued by the Deputy Commissioner The present Forest establishments are entirely inadequate to guard rights of the Government in this matter, and the only hope of putting a stop to these illegal practices is by the assistance of the Civil authorities. As long, however, as persons are at full liberty to utilize any number of undersized cutch trees from all lands outside reserved forests for fencing and other purposes, it seems somewhat

anomalous to enforce strict penalized rules against the same trees being felled for the purposes of manufacturing them into catechu, and the police find some difficulty in understanding these distinctions.

Claims to cutch trees on so-called *bobabaing* lands.

26 The claims put forward to the right to manufacture catechu from trees standing on *bobabaing* lands are numerous, and it is a pleasure to record that in some districts the Deputy Commissioners have issued orders that such applications must be enquired into by village headmen and reported to them, and to find their action upheld by the Commissioner. The only cases enquired into that have been reported to the Conservator have resulted in the claims to the lands as *bobabaing* being rejected, and this was to be expected. As remarked by the Commissioner of the Central Division : "where land has "been left neglected and uncultivated for so many years that cutch forests have sprung "up, I am of opinion that such land should not be recognized as *bobabaing* without the "direct orders of the District Officer in each case."

2.—Protection from Fire.

Forest fires.

27. No systematic protection was attempted in the newly formed forest reserves in this circle. There is no doubt that practically the whole of the teak and cutch producing areas are burnt over each year, the areas that escape being the evergreen forests, which are of comparatively little value. It is generally believed that in very many cases the fires are caused by travellers and originate inside the reserves; fires thus originated would probably be fewer if camping-grounds were cleared at selected localities near water along the more frequented routes, and if cheap *zayats* or sheds were erected to encourage travellers to halt at such places.

3.—Regulation of Grazing and Protection from Cattle.

Areas open and closed to grazing.

28. With the exception of the reserved forests, less areas aggregating 15 square miles within their boundaries, as shown in Form No. 54, in which privileges have been granted to certain villagers residing in their vicinity, the whole of the forests in this circle are open to grazing, but owing to there seldom being any scarcity of fodder near villages, the State areas are not much resorted to as a general rule. Practically no cattle trespass in the State forests.

(c) *Improvement of Forest growth.*

1.—Natural reproduction.

Reproduction of teak &c

29. The general purport of Divisional Officers' notes on this subject is that reproduction of teak, cutch, and pyinkado (*Xylia dolabriformis*) is naturally good, but that annual fires do not often allow the seedlings to survive over one season This is only as must be expected, and until fire-protection is systematically carried out no practical improvement in this respect can be hoped for.

Flowering of bamboos, &c , in the Chindwin.

30. The wabo (*Dendrocalamus Hamiltonii*) is reported to have flowered over extensive areas in the Nantainkwin forests in the Upper Chindwin, but it is too soon to judge with what effect as regards the reproduction of teak. The myinwa (*Dendrocalamus strictus*) was noticed to have flowered over considerable areas in the Upper Myittha near Anyaban and in the Sanni drainage; these areas, which were visited by the Conservator, were found to be one mass of fine cutch seedlings, which will be destroyed almost entirely next season by fire. this bamboo has hitherto been observed to flower over small areas only annually, but the flowering over the localities named was more general than usual. The pyinkado flowered very freely in the Upper Chindwin.

Observations in Minbu division.

31 The reproduction of teak in the Yabè reserve and of cutch in the northern reserves and proposed reserves of the Magwe subdivision is reported to be good. In the Minbu district natural reproduction of teak and cutch is reported to be very bad in most places; this is partly owing to want of seed-bearing cutch trees over large areas, but even in the Môn West reserve, where there are many mature trees, reproduction is bad also, probably owing to the annual recurrence of forest fires.

2.—*Artificial Reproduction.*

Cutch sowings.

32. The only work was in the Minbu division, where 351 acres of old cultivation were sown with cutch (*Acacia catechu*) seed at stake at a cost of Rs. 197. The results are not favourable, the average number of plants alive at the end of the year being 33,120 or 94 per acre.

3.—*Other operations for the improvement of the growing stock.*

Creeper-cutting.

33. In the areas girdled over, all teak trees have been freed from creepers; the cost of this has been included in the girdling expenditure.

(*d*) *Exploitation of Major Forest Produce.*

2.—*Selection fellings.*

Fellings included under this section.

34. Under this head girdling and all teak fellings by authority are dealt with, as well as trees felled for the utilization of which licenses were granted that fixed a minimum felling girth.

Trees girdled.

35. The teak trees girdled during the season 1892-93 for Messrs. The Bombay Burma Trading Corporation, Limited, were as follows:—

	Sanctioned trees.	Girdled trees.
Upper Chindwin	15,703	14,971
Yaw	445	455
Total ...	16,148	15,426

The area searched in the Upper Chindwin is estimated to cover about 1,520 square miles and in the Yaw about 5 square miles, and the average girths of trees girdled were 7 feet 2 inches and 8 feet 5 inches respectively. In the former forests the record shows 175 trees over 12 feet in girth, and in the latter the maximum girth recorded is 12 feet 3 inches; no trees of less than 6 feet in girth were girdled. The work was carried out on the general principle of killing not more than one-third of the marketable trees; in the Upper Chindwin it was found that the forest would allow of an all-round average of about 2 trees in 7 being killed; and in Yaw, where it was found that the young growth was plentiful, the usual proportion was slightly exceeded.

Pyinkado and padauk fellings.

36. In the Upper Chindwin a trade license for 800 pyinkado trees was issued, and the standing trees were marked for felling for conversion into sleepers; but up to the end of the year none had been exported. The girth was fixed at 6 feet and over, but owing to an error of the Extra Assistant Conservator some trees under that girth were marked and felled.

In the Yaw division 39 padauk (*Pterocarpus indicus*) trees of over 7 feet in girth were marked for felling.

Trade and free licenses for timber.

37. Trade licenses for dead teak were issued in the following divisions:—

Upper Chindwin	17—2,550 trees,
Lower Chindwin	28—(not stated),
Yaw	44—(not stated),
Minbu	12—1,930 trees,

and free licenses for teak to be utilized in works of public and private utility were issued as follows for trees under 4 feet 6 inches in girth:—

Upper Chindwin	8—	168 trees.
Lower Chindwin	367—	11,771 ,,
Yaw	114—	3,019 ,,
Minbu	15—	561 ,,

The return for the Upper Chindwin division relates to the months of May and June 1893 only, all former records having been burnt. Free licenses are also reported to have been issued in the Minbu division for 9,895 ingyin (*Shorea Siamensis*) and thitya (*S. obtusa*) trees, but it is not understood under what rule the issue of such licenses for unreserved woods is necessary or authorized.

The large increase in the recorded number of free licenses issued for teak is partly explained by the fact that the rules for their issue only came into force in September 1891. It is for consideration whether the utilization of other classes of timber equally suitable for building purposes should not be gradually insisted on.

Cutch fellings.

38. The number of licenses issued for the manufacture of cutch during the 15 months, and the estimated number of trees, green and dead, utilized, is as follows:—

	Licenses.	Trees.
Lower Chindwin ...	400	48,720
Yaw	296	35,520
Minbu	519	64,280

5.—*Unregulated fellings.*

Fellings included under this section.

39. Under this head fellings are dealt with for which the licenses issued do not fix any specified girth and do not require the trees to be previously marked.

Unreserved timber.

40. The new rule requiring a license to be taken out for unreserved trees when felled for trade purposes came into force from 1st May 1893. It will be introduced with caution, and, as the rules had not been circulated in the vernacular before the end of the year, no licenses were issued and the rules had not been enforced except in the Minbu division, where licenses for 234 unreserved trees were issued.

The returns show certain quantities of timber that paid revenue on passing stations, but there is also a large local trade consumption that has hitherto remained unchecked.

Firewood.

41. Rules concerning the issue of licenses for firewood came into force from 1st August 1892, prior to which date no duty was taken on the fuel used by steamer companies, &c. The estimated requirements of three, six, or twelve months, as the case may be, are now paid for in advance by the principal companies; accounts are adjusted at the close of the period and statements compiled from their books showing the quantities used. The felling or lopping of trees of the reserved kinds and of cutch trees for use as fuel is prohibited.

Charcoal.

42. Monthly licenses were issued as follows, taking 15 months for the current year :—

	1892-93.	1891-92.
Upper Chindwin	46	30
Lower Chindwin	120	
Yaw	784	*Nil*
Minbu	1,262	1,489

The large increase in the Yaw division is undoubtedly due to the Divisional Officer having been relieved of the duty of measuring lessee's timber during the rains, and to his therefore having some time to look about him and enquire into such matters as the issue of licenses, &c. The decrease in the Minbu division is not explained by Mr. Palmer.

Bamboos and canes.

43. The number of bamboos and of canes extracted are given in the statement in Chapter III.

(*e*) *Extraction and transport of Major Forest Produce by Land and Water.*

Major forest produce brought out by Government agency.

44. No timber was actually worked out by Government agency, but the following lapsed to Government and was brought on to the books during the year :—

Division.	Logs. Teak.	Logs. Other.	Tons. Teak.	Tons. Other.
Upper Chindwin	1	9	1	8
Lower Chindwin	481	286	160	43
Yaw	98	6	39	8
Minbu	373	...	307	...
Total ...	953	301	507	49

One lakh of canes were also worked out departmentally for the Jail Deparment.

Timber removed by lessees.

45. The total quantity of timber removed by Messrs. The Bombay Burma Trading Corporation, Limited, including 77 tons requisitioned by public departments, 51 tons measured for duty in Lower Burma, and 334 tons marked for sale and for use by the Corporation locally, is as follows :—

Forests.	Teak logs. Full sized.	Teak logs. Tons.	Under sized.	Tons.	Total tons.
Upper Chindwin	11,328	14,127	3,649	2,273	16,400
Lower Chindwin	14,423	17,995	4,640	2,885	20,880
Yaw	35	38	103	58	96
Minbu	553	662	58	44	706
Total ...	26,339	32,822	8,450	5,260	38,082

These figures are actually for the financial year, as no timber came out from April to June 1893.

The total for the Chindwin forests is the highest on record, and is 7,865 tons better than in 1891-92. In the Yaw and Taungdwingyi (Minbu) forests the Corporation failed to extract the required quantities for the contract year 1892 by 1,104 and by 50 tons respectively, and the question of payment for shortage was under the consideration of the Chief Commissioner at the close of the year.

The distribution of the outturn from the Chindwin forests was :—

Division.	Forest.	Logs.
Upper Chindwin ...	Mawlolkgyi	3,669
	Ma ku	2,111
	Yu	7,006
	Nankamu	756
	Other creeks	1,345
	Total ...	14,977
Lower Chindwin ...	Myittha	5,303
	Palusawa	3,373
	Nautabin	
	Nausalein	
	Taungdwin	3,107
	Patolôn	5,672
	Thinkadân	80
	Yama	1,238
	Total ...	19,063

Timber extracted under licenses or brought to revenue stations.

46. The quantities are as follows in tons wood :—

	Teak.	Other reserved wood.	Unreserved wood.	Firewood and charcoal.
Upper Chindwin ...	1,197	...	2,077	1,500
Lower Chindwin ...	1,190	2	5,105	4,753
Yaw	305	...	16	3,526
Minbu	736	90	375	5,534
Total ...	3,428	92	7,573	15,313

Drift timber operations.

47. The following were the salving operations as regards timber made over to claimants :—

Division.	Logs.		Tons.	
	Teak.	Other.	Teak.	Other.
Lower Chindwin	105	62	31	11
Yaw	439	...	501	...
Minbu	1,462	...	1,170	...
Total ...	2,006	62	1,702	11

Exports to Lower Burma.

48. The quantity of timber exported to Lower Burma by local traders (other than lessees) on payment of revenue was very small, and consisted of 54 tons converted teak and 292 teak oar pieces, or about 11 tons.

(*f*) *Exploitation of Minor Forest Produce.*

1.—Extraction of Fodder and (*2*) *Grazing.*

Grazing privileges.

49. The only grazing in the reserved forests in this circle is that allowed to certain privileged villagers in the Môn West, Pazuchaung, and Tichaungwa reserves of the Minbu division, and the privileges are thus classified :—

Period, months.	Area, square miles.	Open to (numbers.)			
		Head of cattle.	Head of cattle (except goats).	Buffaloes.	Total.
12	8	826	...	...	826
	2	...	300	15	315
6	1	25	...	...	25
3	4	200	...	...	200
Total ...	15	1,051	300	15	1,366

These are the maximum numbers allowed, but the actual number of cattle grazed has not been recorded ; the divisional report under this section, written by Mr. Palmer, contains the one word "*nil.*"

No animals graze in any forests, nor is fodder extracted, on payment.

3.—Miscellaneous produce.

Estimated quantities extracted.

50. The number of licenses issued and the estimated quantities of the principal classes of miscellaneous produce extracted under them are shown in the following table and compared with the year 1891-92:—

Produce.	Upper Chindwin.		Lower Chindwin.		Yaw.		Minbu.		Total estimated, viss.
	Licenses.	Viss.	Licenses.	Viss.	Licenses.	Viss.	Licenses.	Viss.	
1892-93. (*15 Months.*)									
India-rubber	...	4,643	...	12,636	...	...	6	.	17,279
Cutch	...	...	406	1,016,775	296	740,000	519	1,297,500	3,054,275
Thitsi	5	500	139	13,900	...	...	1	100	14,500
Shaw fibre	29	2,896	41	4,100	32	3,200	22	2,200	12,396
Honey and wax ...	223	1,726	10	100	...	...	6	300	2,126
Wood-oil	...	...	191	19,100	13	1,300	49	4,900	25,300
Bark extracts ...	...	...	3	1,500	...	...	..	..	1,500
Barks	...	...	5	500	763	76,300	10	1,000	77,800
Miscellaneous ...	49	14,243	51	10,950	23	2,300	39	3,295	30,788
Total ...	306	24,008	846	1,079,561	1,127	823,100	652	1,309,295	3,235,964
1891-92. (*12 Months.*)									
India-rubber	...		21,927		...	...	8		21,927
Cutch	164		828,000		1,647	3,294,000	915	1,330,000	5,452,000
Other produce ...	295		28,960		...	...	300	23,040	52,000
Total ...	459		878,887		1,647	3,294,000	1,223	1,353,040	5,525,927

From the above it will be observed that there was a considerable reduction in the quantity of India-rubber worked out from the Chindwin, where two men only took out licenses to purchase against three in the previous year.

The cutch industry.

51. The number of cutch licenses issued in 1891-92 was 2,726 against 1,221 in 1892-93; the estimated outturn of the former year has been taken at 2,000 viss per cauldron, and for the year under report at 2,500 viss as the license-holders resorted to various systems of working with extra pots for cooking and boiling the juice, which must have materially increased the outturn. It is estimated that with a reduction of more than 55 per cent. in the number of cauldrons working, the output of cutch was actually less by about 44 per cent. only.

The market rates for cutch at Pakôkku in 1891-92 were (*per 100 viss*)—opening, Rs. 43; maximum, Rs. 51; closing, Rs. 45. In 1892-93 the figures were Rs. 51, Rs. 59, Rs. 55. Red cutch rose at one time to Rs. 73-8-0 and its lowest price was Rs. 60 per 100 viss.

Miscellaneous minor produce.

52. The number of licenses for the less valuable articles of minor produce increased from 595 to 1,704, and the estimated outturn from 52,000 viss to 164,410 viss. There was a decrease in the Minbu division of 167 licenses, and increases in the Yaw and the two Chindwin divisions of 831 and 451 licenses respectively, which is a sign that the system of licenses is becoming more understood by the people and that there is an improvement in the organized working of the department in the three Northern divisions; the cause of the large decrease in the Minbu division is not understood, nor has any explanation been offered concerning it.

Extent of exploitation of the forests.

53. There is no reason to believe that the forests have been overworked for major or for minor forest produce, except as regards cutch. There is practically no green cutch left in the forests of Minbu division outside reserves and proposed reserves; of the 519 licenses issued in 1892-93, 469 were for dead wood and 50 only for green. In the Yaw and Lower Chindwin divisions it has been found from the experience of the year under report that the number of licenses for green cutch, already reduced in the former division from 1,647 to 228 (68 were also issued for dead wood) must be further limited, or it will be impossible to maintain a continued yield of cutch. This matter has been taken in hand as regards the year 1893-94, in which the number of licenses to be issued for the utilization of green cutch has been very considerably curtailed,

CHAPTER III.

GROSS YIELD AND OUTTURN OF FOREST PRODUCE.

Gross outturn of the circle.

54. The estimated gross outturn of minor forest produce has been detailed in paragraph 50 of this report, and the whole outturn of the circle in major and minor produce is summarized in the table below, which shows also the revenue realized on sales under each of the heads.

How extracted	Teak		Other reserved woods.		Unreserved woods.		Firewood and charcoal.		Bamboos		Canes		Other minor produce.		Total revenue under heads I, II, and III.
	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	No.	Rs.	No.	Rs.	Tons.	Rs	Rs.
Government agency, including drift	507	12,200	...	.	50	318	...	...	...	..	100,000	832	...	...	13,350
Lessees	38,082	3,59,797	...	...	...	..	..	..	...	...	...	...	...	...	3,59,797
Purchasers	3,428	20,894	92	1,802	7,573	8,590	15,313	7,433	20,101	20,101	11,015,576	8,276	1,290	96,276	1,63,372
Free grants	6,732	...	..	...	...	...	.	.	..	...	...	...	.	...	...
Total 1892-93 (15 months)...	48,739	3,92,891	92	1,802	7,623	8,908	15,313	7,433	8,386,566	20,101	11,115,576	9,108	1,290	96,276	5,36,519
Total 1891-92 (12 months)...	34,072	2,98,649	16	431	6,130	7,247	2,017	764	4,649,202	10,456	7,775,745	3,261	...	66 694	3,87,502
Increase	14,667	94,242	76	1,371	1,493	1,661	13 296	6,669	3,737,364	9,645	3,339,831	5,847	. .	29,582	1,49,017

55. In teak there is a large proportionate increase under all heads, amounting under Government agency to 293 tons; under lessees to 8,178 tons, under purchasers 1,618 tons, and under free grants 4,578 tons. In other classes the increase is almost entirely under purchasers.

Increase in teak utilized.

56. No information is available as to minor produce removed under privileges, but it is believed that little, if any, advantage was taken of the privileges sanctioned during the year in the reserved forests.

Produce removed under privileges.

57 The following timber brought on to the books, with the balance on hand from the previous year, was disposed of by sale locally :—

Local depôt sales by Government.

Division.	Logs.	Tons.	Sale price.
			Rs.
Lower Chindwin ...	482	161	2,707
Yaw ...	88	32	757
Minbu ...	225	160	4,842
Total teak ...	795	353	8,306
Other timber	292	46	318
Total ...	1,087	399	8,624

Of this revenue Rs. 4,702 are credited under I*a* and Rs. 3,922 under III (without salvage, on account of which Rs. 3,894 are also credited under this head).

The balance in hand at the close of the year was 151 logs teak, of which 143 are in Rangoon, and nine logs other woods.

The 225 logs sold in the Minbu division include 220 lapsed logs from the Yaw forests sold to Messrs. The Bombay Burma Trading Corporation, Limited, at a special all-round rate of Rs. 30 per ton.

The timber at Rangoon consists of 143 logs lapsed drift that were sent down by Mr. Palmer, Deputy Conservator, for sale in January 1893 On arrival it was found that they did not bear the Government confiscation mark, nor as the Conservator personally ascertained were there numbers on the logs, so that they could be checked with the lists, with the measurements in which they could not be brought to agree. The result was that the timber had to be re-advertized; the sale that should have taken place in March has not up to date been effected, and the revenue that should have been credited in the year 1892-93 has not yet been realized.

CHAPTER IV.

FINANCIAL RESULTS.

58. The following comparative statement of the actual revenue and expenditure pertaining to the divisions forming this circle, including share of Direction expenditure in previous years, has been compiled in consultation with the Conservator, Eastern Circle :—

Comparative statement.

Financial year.	Revenue.	Expenditure.		Surplus.
	Rs.	Rs.	Rs.	Rs
1888-89	5,17,770	A 1,88,793 / B 57,697	2,46,490	2,71,280
1889-90	3,60,705	A 36,540 / B 68,374	1,04,914	2,55,791
1890-91	3,19,228	A 29,885 / B 80,965	1,10,850	2,08,378
1891-92	4,03,301	A 34,912 / B 80,993	1,15,905	2,87,396
1892-93	5,21,096	A 50,071 / B 1,11,808	1,61,879	3,59,217
Fifteen months, April 1892 to June 1893...	5,51,315	A 57,647 / B 1,47,787	2,05,434	3,45,881
Forest year, July 1892 to June 1893 ...	5,25,983	A 50,614 / B 1,22,948	1,73,562	3,52,421

Revenue under main heads.

59. The revenue for the past four years is distributed under the several main heads as follows :—

Revenue on	Financial year				Period 15 months.	Forest year.
	1889-90.	1890-91.	1891-92.	1892-93.	1st April 1892 to 30th June 1893.	1st July 1892 to 30th June 1893.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Timber worked by Government agency.	3,514	20,627	4,377	4,702	4,702	4,702
Timber worked by lessees ...	2,01,849	2,07,948	2,80,281	3,59,393	3,59,797	3,59,593
Timber worked by local purchasers.	...	...	...	...	...	...
Teak	1,680	5,902	14,142	18,331	20,894	16,908
Other reserved timber ...			280	884	1,802	1,802
Unreserved timber	3,155	5,607	7,247	6,048	8,590	7,307
Firewood	318	212	704	4,938	7,483	7,344
Bamboo	9,336	10,601	10,456	12,388	20,101	17,171
Cutch	33,700	47,345	54,520	73,440	82,630	71,310
Rubber	3,747	4,181	10,979	9,796	9,805	8,404
Other minor produce ...	3,076	3,962	4,456	11,719	12,949	11,956
Drift confiscated	7,330	7,165	10,269	7,780	7,816	6,660
Miscellaneous	3,000	5,678	5,580	11,677	14,796	12,831
Total ...	3,60,705	3,19,228	4,08,301	5,21,096	5,51,315	5,25,983

The above statement shows a satisfactory increase in local sales in nearly all heads under which the collection of revenue is due to the exertions of the Forest staff, and testifies to improvement of control and to the further development of the license system.

Financial result by divisions.

60. The divisional financial results, as worked out in the Form No. 65, are here given, together with those for the forest year 1892-93—

Division.	Financial year 1892-93.			Period 15 months, April 1892 to June 1893.			Forest year, July 1892 to June 1893.		
	Revenue.	Expenditure.	Surplus.	Revenue.	Expenditure.	Surplus.	Revenue.	Expenditure.	Surplus.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Direction ...	508	...	508	578	...	578	568	...	568
Upper Chindwin ...	1,64,822	26,216	1,38,606	1,77,814	35,328	1,42,486	1,77,814	34,391	1,43,423
Lower Chindwin ...	2,62,919	55,164	2,07,755	2,74,094	68,214	2,05,880	2,63,330	54,010	2,09,329
Yaw	84,948	81,818	3,130	86,964	40,712	—3,748	82,257	84,905	—2,648
Minbu	57,899	48,681	9,218	61,865	61,180	685	52,005	50,256	1,749
Total ...	5,21,096	1,61,879	3,59,217	5,51,315	2,05,434	3,45,881	5,25,983	1,73,562	3,52,421

The Yaw and Minbu divisions show worse proportionate results both for the 15 months period and for the forest year, than for the financial year, as cutch licenses were in 1892-93 issued for varying periods, and the revenue from them was partly credited by the end of June 1892. In 1893, owing to these licenses being issued for six months only, for the period October to March, no revenue from this source was received prior to the end of June.

CHAPTER V.

FOREST ADMINISTRATION.

Alterations in Rules under the Regulation.

61. The rules under the Regulation have been generally revised during the period under report, and the following are the changes that principally affect this circle.

Rules regarding free licenses.

62 Free licenses for the felling and removal of dead or girdled teak trees or timber or other reserved trees must be returned, and will be collected at the time the timber is marked with a "free" hammer-mark; these are necessary precautions to prevent such timber from being sold, and it has been suggested that free licenses should only be issued for a fixed period (say, six months) as a further check on the indiscriminate felling of dead teak trees.

Rules regarding trade licenses.

63. Trade licenses have now to be taken out for the felling or removal of unreserved trees, and for specified descriptions of minor forest produce from all forests below Kindat. Power has been given to the Conservator to sell the right to collect or manufacture certain descriptions of minor produce (including catechu in certain cases) within fixed limits of area by public tender to the highest bidder.

Rules and conditions concerning manufacture of catechu.

64. The rate for licenses for the manufacture of catechu was raised from Rs. 20 to Rs. 60 per cauldron, and the licenses are now issued for six months instead of for the year so as to restrict the work in the forests to the season in which the best cutch is obtained, and to allow of better supervision. It has been laid down that licenses at this rate may be purchased and worked by *bonâ fide* residents in the vicinity of the forests only; speculators can only purchase such as are offered for sale by public tender. The conditions on the license have been revised with the view to penalizing more definitely the felling or utilization of undersized trees, and to limiting the amount of wood used by each licensee; with this object the number and size of the pots that may be used in the whole process of manufacture, and the length of cooking trenches, is fixed for each cauldron.

Girdling obligations with lessees.

65. It is hoped that in 1893-94 the whole of the obligations of Government in its Chindwin contract with Messrs. The Bombay Burma Trading Corporation, Limited, will be fulfilled. With this object the services of four officers of the Upper Controlling Staff in the two Chindwin divisions will be wholly devoted to girdling, the Deputy Conservator in the Yaw division will have to devote quite two months to this duty, and there will probably only be one officer in the whole of the Minbu division during the working season. Administrative work in all four divisions will consequently be greatly handicapped during next year, and there will be very little supervision exercised over subordinates, but the Conservator considers it better to give up one season almost wholly, rather than to have continued interference with administrative duties spread over a further period.

Relations with Civil Officers.

66. The relations of Forest with Civil Officers have been all that could be desired, and the Conservator expresses his thanks to all for the ready assistance and support he and his officers have invariably received from them. There have been practically no complaints of hardship caused to villagers by subordinates of the department.

Gazetted Officers.

67. Mr. T. H. Aplin, Deputy Conservator, from the Minbu division, officiated as Conservator from 15th April to 27th October 1892, and was in charge of the Lower Chindwin division for the rest of the year.

Mr. C. W. Palmer, Deputy Conservator, on return from privilege leave assumed charge of the Minbu division on 24th October 1892, and remained in charge of that division.

Mr. C. L. Toussaint, Assistant (now Deputy) Conservator, was in charge of the Yaw division throughout the year.

Mr. C. W. A. Bruce, Assistant Conservator, was in charge of the Minbu division from 23rd April to 4th August 1892, and on his return from privilege leave assumed charge of the Upper Chindwin division from 16th November 1892. He was Personal Assistant to the Conservators, Eastern and Western Circles, from 3rd May to near the end of the year.

Mr. H. N. Thompson, Assistant Conservator, on transfer from the Kindat revenue station, assumed charge of the Chindwin Forest division from 2nd June 1892, and was transferred to the Mingin subdivision, Lower Chindwin division, from 7th December 1892.

Mr. H. H. Forteath, Assistant Conservator, was employed on the Chindwin throughout the year.

Mr. A. M. Burn-Murdoch, Assistant Conservator, except for two short periods when he held charge of the Minbu division, was in charge of the Magwe subdivision of that division throughout the year.

Mr. D. L. K. Calderwood, Extra Assistant Conservator, on transfer from the Eastern circle, was in charge of the Alôn revenue subdivision, Lower Chindwin division, from 4th March to 22nd May 1893, when he was transferred to the Gangaw subdivision, Yaw division, of which he assumed charge on 1st July 1893.

Mr. C. W. B. Anderson, Extra Assistant Conservator, was appointed on probation from 22nd June 1892, and was employed in the Upper Chindwin division throughout the year in charge of the Kindat revenue subdivision.

Subordinate establishments.

68. The revised scale of Permanent Forest and Dépôt Establishments referred to in paragraph 30 of the Upper Burma Report for last year has not been sanctioned, and the old scale with supplementary temporary establishments remained in force.

The total cost of these establishments is as follows, including Rangers :—

	1891-92. (12 months).	1892-93. (15 months).
	Rs.	Rs.
Permanent.		
Forest and Depôt, B.I.C.	12,427	16,317
Temporary.		
Forest and Depôt, B.I.C.	..	5,227
A-III	1,391	1,467
Total ...	13,818	23,011

General Remarks.

Services of Gazetted Officers.

69. The Conservator would bring to special notice the services of Mr. T. H. Aplin, Deputy Conservator, to whose exertions are mainly due the improved organization in the Chindwin; without the complete and concise notes left by Mr. Aplin in the Conservator's Office the writer would have found far more difficulty than he has done in controlling his charge.

Of the other officers in the upper controlling staff, Messrs. Toussaint, Bruce, and Forteath, Assistant Conservators, have done really good service.

The Extra Assistant Conservators, the Conservator regrets to say, have not contributed in any way towards improving the working power of the department.

Of all the Gazetted Officers Messrs. C. W. Palmer, Deputy Conservator, and C. W. B. Anderson, Extra Assistant Conservator, must be bracketed as having worked in the most unsatisfactory manner.

The sanctioned gazetted staff is quite inadequate to develop the resources of the vast forest areas under its control; there is undoubtedly much revenue lost from want of supervision.

Services of rangers and subordinates.

70. The following rangers and subordinates are specially commended by their Divisional Officers :—Upper Chindwin, Ranger Maung Shwe Lè and Drift Forester Maung Tun Hlaing; Lower Chindwin, Ranger J. W. Anthony; Yaw, Ranger Maung Tha Gywe. Ranger Maung Tha Hmwe was sentenced to nine months' imprisonment and was dismissed the service in March 1893; his previous record was not a good one.

Office establishments.

71. The members of the office establishments have not been generally well reported on. Those in the Conservator's office, especially Mr. P. Mooroogasum, Superintendent, have improved latterly in their work, and the only divisional clerk who has been systematically well reported on is Mr. Manuel.

The services of Mr. J. J. Joseph, late head clerk, Upper Chindwin division, were dispensed with on account of inefficiency.

Health of the department.

72. With the exception the two Chindwin divisions, in which every gazetted officer suffered from fever, in four cases severely, the health of the department has been good throughout the year.

Steam launches.

73. The launch *Chin* was purchased by the department for Rs. 7,874 and arrived in December 1892; she was employed on drift and revenue work in the three southern divisions in December and January, and up to June 1893 was used by the Marine Department.

Elephants.

74. There were 16 elephants attached to the circle at the commencement of the year, of which two died; six new elephants were purchased for Rs. 7,661, and of these two also died, and one animal was transferred from the Civil Department; at the close of the year there are 19 elephants, including one in the Minbu division that has been astray since January.

Acknowledgments to Mr. Oliver.

75. The Conservator cannot close his report without recording the constant valuable and cheerful assistance he has invariably received from Mr. J. W. Oliver, Conservator of Forests, Eastern Circle; without such assistance readily granted but little of the success that has resulted from the year's administration would have been attained.

MANDALAY;
The 28th September 1893.

A. L. HOME,
Conservator of Forests, Western Circle,
Upper Burma.

APPENDICES.

FORM NO. 40.—*Statement showing Area of Reserves, Protected, and Unclassed Forests in the Eastern and Western Circles from the 1st April 1892 to the 30th June 1893.*

Division.	Range.	Civil district or territory.	Name of forest.	Area on 1st April 1892		Added during the year.	Excluded or transferred to other heads	Area on 30th June 1893.		No. and date of notification of addition or transfer	Remarks.
				Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
1	2	3	4	5	6	7	8	9	10	11	12
			EASTERN CIRCLE.								
			Reserved Forests								
Bhamo ...	...	Bhamo ...	Setkala	...	...	23,040	...	23,040	36	No. 37, dated 31st January 1893.	Entered under Katha division in last year's report. The area differs from that given in the notification owing to survey corrections.
Katha	...	Ruby Mines	Ongaing ...	2,880	4	...	...	2,880	4		
			Bamôn	920	1	...	...	920	1		
			Mogôk ...	560	1	...	...	560	1		
			Yebu	400	1	...	...	400	1		
			Peikswè	440	1	...	...	440	1		
			Kyundaung ...	2,000	3	...	...	2,000	3		
			Beruardmyo ...	12,160	19	...	...	2,160	19		
			Katbe	1,280	2	...	...	1,280	2		
			Kyatpin	1,840	3	...	...	1,840	3		
	Lower Shweli.	Mongmit	Namme	...	...	106,880	...	106,880	167	...	Includes 13 square miles subject to ya-cutting privileges
			Kungvaing ...	...	...	43,520	...	43,520	68	Nos. 38 to 42, ... st Jaquary 1893 The areas given differ from those in the notifications owing to survey corrections	Includes 42 square miles subject to ya-cutting privileges
	Upper Shweli.	Mongmit	Maingtha	...	...	110,720	...	110,720	173		Includes 9 square miles subject to ya-cutting privileges.
			Nahan	...	...	60,800	...	60,800	95		
			Nampaw	...	...	56,320	...	56,320	88		
			Total ...	22,480	35	378,240	...	400,720	626		
Pyinmana	...	Pyinmana	Yanaungmyin ...	8,960	14	...	...	8,960	14	...	Subject to ya-cutting privileges.
			Kaing	12,800	20	...	...	12,800	20	...	
			Palwe	83,200	130	...	...	83,200	130	...	Includes 5 square miles subject to ya-cutting privileges up to December 1896
			Pozaungtaung ...	44,800	70	...	...	44,800	70	...	
			Taungnyo ...	64,000	100	...	...	64,000	100	...	Includes 44 square miles subject to ya-cutting privileges.
			Yèni	42,240	66	...	...	42,240	66	...	
			Ngalaik	70,400	110	...	...	70,400	110	...	
			Minbyin	92,800	145	...	...	92,800	145	...	Includes 32 square miles subject to ya-cutting privileges.
			Yônbin	83,200	130	...	...	83,200	130	...	Includes 18 square miles subject to ya-cutting privileges.
			Total ...	502,400	785	...	...	502,400	785		
			Total taungya areas ...	72,400	113	40,960	...	113,360	177		
			Total areas free of taungya privileges.	452,480	707	360,320	...	812,800	1,270		
			Total Reserved Forests	524,880	820	401,280	...	926,160	1,447		

			PROTECTED FORESTS							
Bhamo	Sinbo ...	Bhamo	Himangin ...	...	41	...	...	...	41	Proposed as reserve.
			Nôkcho, Sinbo ...	...	8	10,880	...	...	30	
			Nampwa, Sinbo ...	...	5		...	...		
	Mogaung	do	Uya-hatha ...	...	24	...	...	...	24	Proposed reserve
			Namkwan Taungni ...	...	3	30,080	...	...	50	
			Indawgyi ...	...	20	...	...	...	20	
	Shwegu ..	do	Sinkan and Nansin ..	...	60	153,600	...	...	300	
			Movu ...	...	10	6,400	...	...	20	
			Shwegu ...	...	...	19,200	...	...	30	
			Nampa (Wema) ...	...	30	61,440	...	...	126	Proposed reserve.
			Kaukkwe ...	...	50	128,000	...	...	250	80 square miles proposed Nanôntî reserve.
			Mozit ...	...	20	115,200	...	...	200	130 square miles proposed Mozit reserve.
			Indaw ...	...	...	19,200	...	...	30	
	Bhamo ...	do	Molè ...	...	15	54,400	...	...	100	
			Bhamo ...	...	...	12,800	...	...	20	
			Hakau and Upper Defile	...	...	32,000	...	...	50	
			Tapaing ...	...	20	...	...	...	20	
			Total Bhamo ...	...	306	643,200	...	...	1,311	
	Meza ...	Katha	Petsut ...	...	37	11,520	...	...	55	Proposed reserve extension old area, 74 square miles settled.
			Auktaw ...	...	37	1,920	...	...	40	
			Mawhun ...	...	42	...	...	...	42	
			Môhnyin ...	...	...	44,800	...	...	70	Entered under Bhamo division last year.
			Nami ...	...	12	12,160	...	...	31	
			Nankan ...						52	
			Pilè ...						15	
			Pyintè ...						58	
			Tattwin ...	...	336	...	68,480	...	79	Shown last year as Meza chaung forest
			Taungchaung ...						15	
			Banmauk ...						10	
			Kalat ...	...	8	12,800	...	...	28	Estimated.
			Kônbaung ...	...	20	...	...	...	20	Proposed reserve.
			Molo Kyauktabo ...	...	10	...	...	...	10	
	Upper Shweli.	Môngmit	Lwewin ...							
			Lwekin ...							
			Lônsa ...	...	28	...	...	...	28	
			Kônmawôn ...							
			Matataung ...	...	6	...	...	...	6	Estimated.
			Nampan and Nathlaing chaungs ...	...	30	...	...	...	30	
			Zingvan chaung ...	...	10	...	...	...	10	
			Leti or Nanlaing ...	...	10	...	...	...	10	
			Tadaunggwe ...	...	5	...	...	...	5	
	Ruby Mines subdivision	Ruby Mines	Sagadaung ...	...	30	...	...	...	30	Mixed cutch and teak.
Katha ...			Inggyin ...							
	Lower Shweli.	ditto	Hlebo ...							
			Ingyinbin ...	...	...	96,000	...	...	150	
			Nyaungbintha ...							
			Waingôn ...							
	Myadaung subdivision.	.....	Taukta and Kugyi ...	...	10	...	...	...	10	
			Hintha	...	25	...	...	...	25	
			Zibin ...		5	...	...	...	5	
	Ruby Mines.	.....	Wapyudaung ...		20	...	...	...	20	
			Nyaungtauk ...	...	5	...	...	...	5	
	Myadaung subdivision	Katha	Pôngôn, Naunglôn, and Shadaw.	...	10	...	...	...	10	Cutch areas.
			Kyanhnyat-Twinngè ...	...	5	...	...	...	5	
			Twinngè-Thabetkyin ...	...	15	...	...	...	15	
	Katha ...	Katha	Môda-Thitladaw ...	...	10	...	3,200	...	5	
			Nattaga-Kalôn ...	...	40	...	...	...	40	Pyinkado forests.
			Yedwet-Magyikôn ...	...	25	...	...	...	25	
			Moda-Yinkè ...	...	...	51,200	...	...	80	
	...	Bhamo	Setkala	...	65	...	23,040 (a)	...	29	(a) Transferred to reserves in the Bhamo division.
			Ngôsin ...	...						
	Lower and Upper Shweli.	Môngmit	Namme	...	225	...	134,400	...	15	167 square miles transferred to reserves.
			Kungyaung and Thè ...	...	126	...	80,640	...		43 square miles survey correction.
			Maingtha	...	161	7,680	110,720	...		68 square miles transferred to reserves.
			Nahan	...	87	5,120	60,800	...	...	58 square miles survey correction.
			Nampaw	...	113	35,200	56,320	...	80	Transferred to reserves and 12 square miles survey correction.
			Total Katha ...	...	1,568	278,400	537,600	...	1,163	Transferred to reserves and 8 square miles survey correction.
			Protected Forests carried over ...	...	1,824	921,600	537,600	...	2,474	Transferred to reserve.

FORM NO. 46.—*Statement showing Area of Reserved, Protected, and Unclassed Forests in the Eastern and Western Circles*—continued.

Division.	Range	Civil district or territory	Name of forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		No. and date of notification of addition or transfer.	Remarks.
				Acres.	Equivalent in square miles	Acres.	Acres.	Acres.	Equivalent in square miles.		
1	2	3	4	5	6	7	8	9	10	11	12
			EASTERN CIRCLE—continued.								
		PROTECTED FORESTS—Brought forward ...			1,874	921,600	537,600		2,474		
Mandalay		Yamèthin and Meiktila.	Myitha	...	230	128,000	...	...	450		
		Kyauksè ...	Paniaung	...	...	64,000	...	...	100		
		Baw	Zawgyi	...	...	6,400	...	...	10		30 Yatsauk now shown under Southern Shan States.
		Mandalay ...	Myitngè	...	70	64,000	...	...	170		
		Thibaw ...	ditto	...	252	...	...	...	252		
		Thônzè ...	ditto	...	126	...	...	...	126		
		Thetmu ...	ditto	...	60	...	...	...	60		
		Mandalay ...	Madaya	...	100	64,000	...	...	200		
		Maingôn ...	ditto	...	100	...	...	...	100		
			Total Mandalay ...	...	938	326,400	...	...	1,448		
		Ye-u ...	Yabin	...	60	...	...	...	60		
			Pyaungbwè	...	70	...	...	...	70		
			Maingwun	...	60	...	...	...	60		
			Sareiktha	...	15	...	...	...	15		
			Naukyitha	...	107	...	...	...	107		
			Nanbyan	...	33	...	...	...	33		
			Hnaw	...		451,200	...	...	705		
			Indainktha	...		192,000	...	...	300		
		Shwebo ...	Thaw	...	171	...	...	...	171		
			Hnetpyittaung or Sadwingyi.	...	30	...	...	...	30		
			Baw	...	90	...	...	...	90		
			Pyinsala	...	...	325,760	...	...	509		
			Chaukywa	...	...	160,000	...	...	250		
		Katha ...	Tinwa	...	24	...	...	...	24		
			Nabe	...	13	...	...	...	13		
			Wabo	...	16	...	...	...	16		
			Kalawpa	...	8	...	...	...	8		
			Nammaw-Kyundawgyi	...	18	...	...	...	18		
			Namma	...	32	...	...	...	32		
			Nanyônga	...	20	...	...	...	20		
			Kansa	...	51	...	...	...	51		
			Inga	...	23	...	...	...	23		
			Searng	...	10	...	...	...	10		
			Laga	...	58	...	...	...	58		
Mu			Tagyaing	...	60	...	...	...	60		
			Pyinchaung	...	6	...	...	...	6		
			Kyaukpyu	...	4	...	...	...	4		
			Tinwachaung	...	20	...	...	...	20		
			Nammaw (Daungyo). ...	...	10	...	...	...	10		
			Kin	...	15	...	...	...	15		
			Segyingôn	...	10	...	...	...	10		
			Taungmaw	...	10	...	...	...	10		
			Sinlin	...	48	...	...	...	48		
			Taman	...	...	102,400	...	...	160		
			Manyu	...	...	96,000	...	...	150		
			Mawkwin	...	...	76,160	...	...	119		
			Mankin	...	...	40,320	...	...	63		
			Swele	...	...	64,000	...	...	100		
			Phale	...	...	33,280	...	...	52		
			Total Mu ...	...	1,092	1,541,120	...	...	3,380		

Pyinmana	Waiwegôn or Lèwè.	Pyinmana	Yeni ...	...	19	...	...	...	19	
			Minbyin ...	...	25	...	...	...	25	
			Yônbin ...	...	10	...		...	10	
			Yanaungmyin ...	...	5	...		...	5	
			Kaing ...	...	40	...	...	...	40	
			Palwe ...	...	10	...	...	...	10	
			Ngalaik ...	...	30	...	...	...	30	
	Taungnyo...		Taungnyo ...	...	20	...	...	...	20	
			Pôzaungtaung ...	...	70	...	...	...	70	(a) One hundred square miles lie in the Pyinmana and 75 square miles in the Yamèthin districts.
			Paunglaung ...	...	400	...	...	...	400	
			Sinthè ...	...	175(a)	...	...	...	175	
	Yamèthin	Yamèthin	Myohla ...	...	50	...	...	...	50	
			Shwemindin ...	...	60	...	...	...	60	
			Kyinzu ...	...	70	...	...	...	70	
			Hlawzin ...	...	40	...	...	...	40	
			Yanaung ...	...	20	...	...	...	20	
			Total Pyinmana ...	...	1,044	...	...	...	1,044	
Shan States.	...	Hsahtung	Pawn ...	...	80	...	...	...	80	
	...	Mawkmè	Pawn ...	...	20	...	...	...	20	
			Kantutong ...	...	40	...	...	...	40	
			Teng ...	...	15	...	...	...	15	
			West Salween ...	...	8	...	...	...	8	
			East Salween ...	...	50	...	...	...	50	
	...	Môngpan	Nampan ...	...	10	...	...	...	10	
			Hwehawn	...	13	...	...	...	13	
			West Salween ...	...	12	...	...	...	12	
			East Salween ...	...	60	...	...	...	60	
			Teng	...	70	...	...	...	70	
			Nakai	...	18	...	...	...	18	
			Hwelong	...	12	...	...	...	12	
	...	Kengtaung	Small streams on West Salween.	...	26	...	...	...	26	
			Mepa	...	8	...	...	...	8	
			Hweyè	...	18	...	...	...	18	
			Small streams on East Salween.	...	30	...	...	...	30	
	...	Môngpu	Salween	...	20	...	...	...	20	
	...	Mongnut	Namsin	...	30	...	...	...	30	
	...	Kenghkam	Namsin	...	5	...	...	...	5	
	...	Ywangan	... ...	...	12	...	...	...	12	
	...	Yatsauk	Panlaung	...	150	...	...	...	150	..... Given under Mandalay division in last year's report.
			Myitmè	...	112	20,480	...	...	144	.....
			Zawgyi	...	30	...	...	...	30	.....
			Total Shan States ...	...	849	20,480	...	...	881	
			Total Protected Forests	...	5,797	2,809,600	537,600	...	9,347	
			GRAND TOTAL EASTERN CIRCLE.	...	6,617	3,210,880	537,600	...	10,794	
			WESTERN CIRCLE.							
			RESERVED FORESTS.							
Upper Chindwin	...	Upper Chindwin	Kampat	37,760 (b)	59 (b)	...	...	37,760	59	(b) Formed part of Lower Chindwin division in report for 1891-92.
			Kindat	...	...	78,720	...	78,720	123	No. 1, dated 4th January 1893.
			Ahlaw	...	...	31,360	...	31,360	49	No. 167, dated 2nd May 1893
			Total Upper Chindwin	37,760 (b)	59 (b)	110,080	...	147,840	231	
Lower Chindwin.	Mingin...	Upper Chindwin ...	Matu	115,200	180	...	...	115,200	180	
			Carried over ...	152,960	239	110,080	...	263,040	411	

FORM NO 46.—*Statement showing Area of Reserved, Protected, and Unclassed Forests in the Eastern and Western Circles*—continued.

Division	Range.	Civil district or territory.	Name of forest.	Area on 1st April 1893.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		No. and date of notification of addition or transfer	Remarks.
				Acres.	Equivalent in square miles.	Acres	Acres.	Acres	Equivalent in square miles.		
1	2	3	4	5	6	7	8	9	10	11	12
			WESTERN CIRCLE—continued.								
			RESERVED FORESTS.								
			Brought forward	152,960	239	110,080	...	263,040	411		
Minbu	Minbu	Minbu	Nwamadaung	-	-	23,040	-	23,040	36	No. 217	
			Môn West	...	...	60,800	...	60,800	95	No. 218	Includes 16 square miles subject to taungya privileges.
	Sedôktava	Minbu	Pazuchaung	-	...	9,600	...	9,600	15	No. 219 dated 20th June 1893.	Includes 3 square miles subject to taungya privileges.
			Tôktochaung	...	...	5,120	...	5,120	8	No. 220	
			Tichaungwa	...	...	12,160	...	12,160	19	No 221	
			Paungchaung	...	...	7,680	...	7,680	12	No. 222	
	Taundwingyi	Magwe	Sadôn	...	...	59,200	...	59,200	92	No. 140 dated 8th	
			Sunchaung	...	...	58,880	...	58,880	92	No, 441 Dec 1892	
			Yabè	...	...	26,880	...	26,880	42	No. 45, dated 3rd February 1893.	
			Total Minbu	-	...	263,360	...	263,360	411		
			Total taungya areas		...	12,160	...	12,160	19		
			Total areas free of taungya privileges	152,960	239	361,280	...	514,240	805		
			Total Reserved Forests	152,960	239	373,440	...	526,400	822		
			PROTECTED FORESTS			Sq. miles	Sq miles.				
Upper Chindwin.		Upper Chindwin and Katha.	Uyu	...	900(a)	350	...	...	1,250	.....	More accurate estimate and transfers.
			Nankamu	...	700(a)	...	350	...	350	.....	Transferred to other forests.
			Chaunggyi	...		1,000	-		1,000	- ...	
			Nankadin	...	...	160	...	-	160	.....	
			Nansaga	...	...	300	...	...	300	.....	
			Nantainkwin	...	...	350	...	...	350	.....	
			Nopin	...	...	60	...	...	60	.....	
			Kauksa	...	...	250	...	...	250	.....	
		Taungdut	Taungdut	...	...	150	-	...	150	.....	
			Namthamyit	...	100(a)	...	100	...		... .	Transferred to Uyu
			Sanda	...	400(a)	...	200	...	200	.....	Transferred to Nanpaman.
			Kodan	...	900(a)	..	200	-	700	.....	Transferred to other forests.
			Upper Yu	...	55(a)	...	55	...	..	.....	49 square miles declared Ahlaw reserve; 6 square miles reduced on further examination
		Upper Chindwin	Wesalaung and Wesalun	..	60(a)	...	60	...		.....	Transferred to Yu.
			Yu	...	210(a)	263	...	...	473	.....	193 square miles proposed Yu reserve; addition more accurate estimate and transfers
			Kindat	...	149(a)	...	149	...	...	.....	123 square miles declared Kindat reserve; 26 square miles transferred to Yu.
			Nanpaman and Nanka Chindwin, Upper Reaches	...	..	200	-	...	200	.....	
				...	..	1,250	...	...	1,250	.....	
			Total Upper Chindwin	-	3,474(a)	4,333	1,114	...	6,693	...	(a) Formed part of Lower Chindwin division in report for 1891-92.

Lower Chindwin.	Mingin ...	Upper Chindwin	Proposed Bôn reserve ...	...	114	...	...	...	114	.....	
			Proposed Kyaukka rereserve ...	...	50	...	18	...	32	.....	Area reduced on survey.
			Proposed Labin reeserve ...	...	40	...	...	...	40	.....	
			Proposed Tan reserve ...	...	20	...	...	...	20	.....	
			Proposed Wayè reserve ...	...	23	...	...	...	23	.....	
			Proposed Taungdwin reserve ...	...	262	...	...	...	262	.....	
			Yezagyo, West bank ...	...	90	...	...	...	90	.....	
			North Taungdwin	...	160	...	...	...	160	.....	
			Mahamyaung	...	900	...	550	...	350	.....	Area reduced on survey.
			Nwa (Myittha)	...	...	68	...	...	68	.....	
			Lower Myittha (cutch) ..	...	...	27	...	...	27	.....	
	Kanni and Pagvi.	Lower Chindwin	Proposed Patolôn reserve ...	...					40	.....	
			Proposed East Patolôn reserve	...	500	...	...	...	220	.....	
			Patolôn	...					240	.....	
			Proposed North Yama reserve	...					119	.....	
			North Yama	...	140	30	...	..	91	.....	More accurate estimate and transfer.
			Kabyu-Kabaing	...	400	...	200	...	200	.....	More accurate estimate.
			Thinkadôn	...	60	...	...	...	60	.....	
			Kanni	...	100	...	...	...	100	.....	
			South Yama	...	60	...	50	...	10	.....	Transferred to North Yama.
	Kanni ...	Ye-u	Hnaw	...	...	300	...	...	300	.....	
			Proposed Laungtaung reserve...	...	96	...	96	...	...	.....	
			Proposed Kunzè reserve ..	...	125	...	125	...	...	.....	
	Gangaw ...	Pakôkku	Upper Myittha and Chawlaw ...	...	150	...	150	...	..	.....	Transferred to Yaw division.
			Maw	...	200	...	200	...	...	.....	
			Bôn	...	40	...	40	...	...	.....	
			Total Lower Chindwin ...	...	3,530	465	1,429	...	2,566		
Yaw	Kyaw ...	Pakôkku	Proposed Kyaw reserve ...						234		
			Kyaw	...	350	155	...	...	271	.....	More accurate estimate.
			Proposed Kyauksit reserve ...						172		
			Proposed Pindaung reserve ...						22		
	Yaw ...	ditto	Proposed Pindaung extension reserve.	..	500	...	...	...	15		
			Proposed Man reserve						36		
			Yaw			400	..	...	655	.....	
	Laungshè	ditto	Salin ...	...	200	200	...	...	400	.....	More accurate estimate.
			Môn ...	...	150	200	...	...	350	.....	
	Pakôkku ..	ditto	Dry belt of Irrawaddy ...	...		209	...	...	200	.....	Estimate.
			Proposed Laungtaung reserve ..	...	...	96	...	...	96	.....	Transferred from Lower Chindwin division.
	Gangaw ...	ditto	Proposed Kunzè reserve	...	...	.125	...	...	125	.....	
			Upper Myitha	...		1,079	...	...	1,079	.....	Revised estimate of area.
	Myingyan	Myingyan ...	Myingyan	...	200	500	...	...	700	.....	More accurate estimate.
			Total Yaw ...	...	1,400	2,955	...	..	4,355		
Minbu	Sidôktaya	Minbu ...	Môn	-	960	...	149	...	811	.....	Tranferred to reserves.
	Minbu ...	do.	Man	...	200	...	...	...	200		
			Salin	...	150	...	36	...	114	.....	ditto.
			Yabè			...	42	...	...	.....	ditto.
			Kyaukmichaung			...		...			
			Bankôn	...	250	...	...	...	208		
			Kinmuntaung			...		...			
			Sadôn			...	92	...	...	.....	ditto.
	Taung-dwingyi.	Magwe	Ngamin	...	160	...		...	68		
			Yinmalè			...		...			
			Sunchaung			...	92	...	...	.....	ditto.
			Lèbu	...	300	...		...	208		
			Yin								
			Pin	...	170	...	...	...	170		
			Total Minbu ..	...	2,190	...	411	...	1,779		
			Total Protected Forests ...	...	10,594	7,753	2,954	...	15,393		
			Grand Total Western Circle ...	...	10,833	8,336	2,954	...	16,215		

FORM NO. 46.—*Statement showing Area of Reserved, Protected, and Unclassed Forests in the Eastern and Western Circles*—concluded.

Division.	Range.	Civil district or territory	Name of forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		No and date of notification of addition or transfer.	Remarks.
				Acres.	Equivalent in square miles.	Acres	Acres.	Acres.	Equivalent in square miles.		
1	2	3	4	5	6	7	8	9	10	11	12
Total Reserved Forests, Eastern Circle.	...		Taungya areas	72,400	113	40,960	...	113,360	177		
			Area free of taungya privileges ...	452,480	707	360,320		812,800	1,270		
			Total area	524,880	820	401,280	...	926,160	1,447		
Total Reserved Forests, Western Circle			Taungya areas	...	....	12,160	...	12,160	19		
			Area free of taungya privileges ...	152,960	239	361,280	...	514,240	803		
			Total area	152,960	239	373,440		526,400	822		
Grand Total Reserved Forests Upper Burma.	..		Taungya areas	72,400	113	53,120	..	125,520	196		
			Area free of taungya privileges	605,440	946	721,600	...	1,327,040	2,073		
			Total area	677,840	1,059	774,720	...	1,452,560	2,269		
						Square miles.	Square miles				
			Total Protected Forests, Eastern Circle ...	...	5,797	4,390	840	..	9,347		
			Total Protected Forests, Western Circle ...	...	10,594	7,753	2,954	.	15,393		
			Grand Total Protected Forests Upper Burma .	...	16,391	12,143	3,794	..	24,740		
			GRAND TOTAL RESERVED AND PROTECTED FORESTS UPPER BURMA.	...	17,450	13,353	3,794	..	27,009		

FORM NO. 47.—*Statement showing the Progress made in, and the Expenditure incurred on, Forest Settlement in the Eastern and Western Circles from 1st April 1892 to 30th June 1893*

Name of forest division	Name of civil district or territory	Area already settled at commencement of the year	Areas finally settled during the year: No and date of Government order according final sanction to the settlement	Areas finally settled during the year: Name of forest settled	Areas finally settled during the year: Area in square miles	Expenditure incurred during the year on areas finally settled: In forest accounts	Expenditure incurred during the year on areas finally settled: In other accounts	Entire cost per square mile of areas finally settled during the year	Areas undergoing settlement: At commencement of the year: Name of tract	Areas undergoing settlement: At commencement of the year: Area in square miles	Areas undergoing settlement: Taken in hand during the year: Name of tract	Areas undergoing settlement: Taken in hand during the year: Area in square miles	Expenditure incurred during the year on areas undergoing settlement: In forest accounts	Expenditure incurred during the year on areas undergoing settlement: In other accounts	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
EASTERN CIRCLE						Rs.	Rs.	Rs.					Rs	Rs	
Katha	Ruby Mines	35	.....	.....											
Pyinmana	Pyinmana	785	.....	.....											
Bhamo	Bhamo	..	Notification No 37, dated 31st January 1893	Setkhala	36										
			Notification No 38, dated 31st January 1893	Nammè	167										
			Notification No 39, dated 31st January 1893	Kungyaung	68										
Katha	Mōngmit		Notification No 40, dated 31st January 1893	Maingtha	173	5,768		9·2							
			Notification No 41, dated 31st January 1893	Nahan	95										
			Notification No. 42, dated 31st January 1893	Nampaw	88										
Bhamo	Bhamo		.....												
									Uya Hatha	24	.....				Areas enquired into during the year by Forest Settlement Officer
Katha	Katha		.....	.....	...	...			Hmangin	41	.....	..			
									Nampa	126					
									Petsut	37	.....				
									Auktaw	37	.....	..	39		
									Mawhun	42	.....				
Mu	Ye-u		.....	.....					Mohnvin	60	Mohnvin	10			
									Yahin	60	Kalawpa	8			
									Pyaungthwè	70	Wabo	16			
									Maingwun	60	Nabe	13			
									Sareiktha	15	Tinwa	24			
									Nankvitha	107	Inga	23			
									Naubyan	33	Sinlin	48			Areas awaiting enquiry
											Thaw	171			
	Total Eastern Circle	820			627	5,768		9·2		712		313	39		
WESTERN CIRCLE.															
I.—RESERVED FORESTS															
Upper Chindwin	Upper Chindwin	59	Notification No 1, dated 1st April 1893	Kindat	123										
	Ditto		Notification No 167, dated 2nd May 1893	Ahlaw	49										
	Ditto														
	Total Upper Chindwin	59	.....	.....	172	..			.....						
Lower Chindwin	Upper Chindwin	180	.....	.....		..	..	..	.....		..	..			
Yaw	...		.....	.....		..					.....	..			
Minbu	Minbu		Notification No. 217, dated 20th June 1893	Nwamadaung	36										
	Do.		Notification No 218, dated 20th June 1893	Mōn West	95										
	Do.	...	Notification No 219, dated 20th June 1893	Pazuchaung	15										
	Do.		Notification No 220, dated 20th June 1893	Tōktachaung	8										
	Do		Notification No 221, dated 20th June 1893	Tichaung	19	141	195	·8	..		..				
	Do		Notification No. 222, dated 20th June 1893	Paungchaung	12										
	Magwe		Notification No 440, dated 8th December 1892	Sadon	92										
	Do		Notification No 441, dated 8th December 1892	Sunchaung	92										
	Do.		Notification No. 45, dated 2nd February 1893	Yabè	42										
	Total Minbu		...	.....	411	141	195	·8	..	...	..	..	..		
	TOTAL RESERVED FORESTS WESTERN CIRCLE	239	..	..	583	141	195	·6	..	..	..	.	.		

FORM NO. 47.—*Statement showing the Progress made in, and the Expenditure incurred on, Forest Settlement in the Eastern and Western Circles from 1st April 1892 to 30th June 1893*—concluded.

Division.	Name of civil district or territory.	Area already settled at commencement of the year.	Areas finally settled during the year.						Areas undergoing settlements.					Remarks.
			No. and date of Government order according final sanction to settlement.	Name of forest settled.	Area in square miles.	Expenditure incurred during the year on areas finally settled. In forest accounts.	Expenditure incurred during the year on areas finally settled. In other accounts.	Entire cost per square mile of areas finally settled during the year.	At commencement of the year. Name of tract.	At commencement of the year. Area in square miles.	Taken in hand during the year. Name of tract.	Taken in hand during the year. Area in square miles.	Expenditure incurred during the year on areas undergoing settlement. In forest accounts.	Expenditure incurred during the year on areas undergoing settlement. In other accounts.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
WESTERN CIRCLE—concluded.		Sq. ms.				Rs.	Rs.	Rs.							
II.—PROTECTED FORESTS.															
Upper Chindwin	Upper Chindwin	...	...	...	...	...	...	...	Yu ...	193	...	...	...	...	
Lower Chindwin	Upper Chindwin	...	...	...	...	...	...	...	Taungdwin ...	262	...	...	...	...	
	Ditto	...	...	...	...	...	...	...	Bôn	114	...	...	...	...	
	Ditto	...	...	...	...	...	...	...	...	...	Kyaukka ...	32	...	...	
	Ditto	...	...	...	...	...	...	...	...	...	Labin	40	...	...	
	Ditto	...	...	...	...	...	...	...	...	...	Tau ...	20	...	...	
	Lower Chindwin	...	...	...	...	...	...	...	...	...	Waye	22	...	...	
	Ditto	...	...	...	...	...	...	...	Patolôn ...	40	...	...	...	...	
	Ditto	...	...	...	...	...	...	...	North Yoma ...	119	...	...	306	...	
	Pakôkku	...	...	...	...	...	...	...	Laungtaung ...	96	East Patolôn ...	220	112	...	Transferred to Yaw division.
	Do.	...	...	...	...	...	...	...	Kunzè ...	116	...	...	173	...	
	Total Lower Chindwin ...	...	...	...	...	...	...	...	...	747	...	334	531	...	
Yaw	Pakôkku	...	...	...	...	...	...	...	Kyaukse ...	172	...	...	51	...	
	Do.	...	...	...	...	...	...	...	Kyaw	234	...	...	1,359	...	
	Do.	...	...	...	...	...	...	...	Pindaung ...	22	...	...	128	...	
	Do.	...	...	...	...	...	...	...	...	...	Pindaung extension ...	15	87	...	
	Do.	...	...	...	...	...	...	...	...	...	Man	36	209	...	
	Total Yaw ...	...	...	...	...	...	...	...	...	428	...	51	1,834	...	
Minbu	Magwe	...	...	...	...	...	...	...	Kyaukmichaung ...	28	...	...	...	...	
	Do.	...	...	...	...	...	...	...	Kinmuntaung ...	49	...	...	...	...	
	Do.	...	...	...	...	...	...	...	Ngamin chaung ...	85	...	...	...	...	
	Do.	...	...	...	...	...	...	...	Yinmalè ...	17	...	...	...	...	
	Total Minbu ...	...	...	...	...	...	...	...	...	179	...	...	...	...	
	Total Protected Forests ...	...	...	...	...	...	...	...	...	1,547	...	385	2,365	...	
	Total Reserved Forests ...	239	...	...	583	141	195	·6	...	...	...	...	...	...	
	Total Western Circle ...	239	...	...	583	141	195	·6	...	1,547	...	385	2,365	...	
	Total Eastern Circle ...	820	...	...	627	5,768	...	9·2	...	712	...	313	39	...	
	Total Western Circle ...	239	...	...	583	141	195	·6	...	1,547	...	385	2,365	...	
	GRAND TOTAL UPPER BURMA ...	1,059	...	...	1,210	5,909	195	5·0	...	2,259	...	698	2,404	...	

	Rs.
Debited to A-VIII (*b*) Western Circles	2,511
Deduct—	
Compensation for depôt lands ...	146
Total charges on forest settlements debited to A-VIII (*b*) ...	2,365
Add—	
Erroneously charged to A-VIII (*a*)	141
Actual total charges on forest settlements in Forest Department	2,506

FORM No. 48.—*Statement showing Record of Demarcation and Maintenance of Boundaries in the Eastern and Western Circles from 1st April 1892 to 30th June 1893.*

Division.	Length of boundaries artificially demarcated during the year.	Length of previously existing boundaries repaired	Length of previously existing boundaries not repaired.	Total length of artificially marked boundaries at the close of the year	Length of boundaries not demarcated at the close of the year	Length of natural boundaries not requiring artificial marks	Total length of boundaries at the close of the year.	Expenditure on demarcation during the year.		Remarks
								On new work	On repairs.	
1	9	3	4	5	6	7	8	9	10	11
EASTERN CIRCLE.										
RESERVED FORESTS.	Miles	Miles.	Miles	Miles	Miles	Miles	Miles.	Rs.	Rs.	
Bhamo	16	..	.	16	5	..	21	192		
Katha	244	...	21	265	117	...	382	2,727		
Mu	...	...	...	...	..	.	...	624		
Pyinmana	35	...	210	245	190	25	460	1,099	...	110 miles of the boundary entered in column 6 have been temporarily demarcated.
Total Eastern Circle ...	295	.	231	526	312	25	863	4,642	...	
WESTERN CIRCLE.										
Upper Chindwin	...	...	...	...	168	82	250	...	...	73 miles of the boundaries (Minbu division) entered in column 6 have been temporarily demarcated.
Lower Chindwin	..	...	...	...	30	70	100	...	...	
Yaw	...	...			...		...	580(a)		(a) Cost of iron tablets.
Minbu	13	...	...	13	220	108	341	2,094 (b)	...	(b) Includes Rs. 1,323 value of iron tablets
Total Western Circle ...	13	...	...	13	418	260	691	2,674(c)	...	(c) Total expenditure charged to A-VIII (a), 'Demarcation,' Rs 2,815. Difference Rs. 141 erroneously debited to that sub-head instead of to A VIII (b) "cost of forest settlement."
GRAND TOTAL UPPER BURMA ...	308	...	231	539	730	285	1,554	7,316	...	

Boundaries between reserved forests have not been entered in this form

FORM NO. 49.—*Statement showing Forest Areas Surveyed and under Survey in the Eastern and Western Circles from 1st April 1892 to 30th June 1893.*

Division.	Areas surveyed and under survey during the year.																						Areas remaining to be taken under survey.	Total forest area at end of the year as per Form No. 46.	Cost.			Remarks.
	Special surveys—maps on 4-inch scale or over, by Survey of India Department or Forest Survey Branch.								Ordinary included in district surveys.								Chain and compass or other surveys by local officers.											
	With interior details.					Boundary surveys.			With interior details.					Boundary surveys.			With interior details.					Boundary surveys.						
	With details of growing stock.		Without details of growing stock.						With details of growing stock.		Without details of growing stock.						Four-inch or over.		Under 4-inch.									
	Previous.	Of the year.	Previous.	Of the year.	Total cost.	Previous.	Of the year.	Total cost.	Previous.	Of the year.	Previous.	Of the year.	Total cost.	Previous.	Of the year.	Total cost.	Previous.	Of the year.	Previous.	Of the year	Total cost.	Previous.	Of the year	Total cost.			Previous.	Of the year.	Entire cost of all surveys to end of the year.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
	S. m	S. m.	S. m.	S. m.	Rs.	S. m.	S m	Rs	S. m.	S. m.	S. m	S. m.	Rs	S. m.	S. m.	Rs.	S. m.	S. m.	S. m.	S. m.	Rs.	S. m.	S. m.	Rs.	S. m.	S. m.	Rs.	Rs.	Rs.	
EASTERN CIRCLE.																														
Bhamo	...	...	...	...	...	...	.	...	...	...	...	...	...	...	...	...	...	...	191	250	601	...	...	72	906 a	1,347	1,505	673	2,178	
Katha	...	. .	...	...	.	...	...	...	...	...	...	...	...	...	...	...	...	...	221	284	218	...	...	369	1,284 b	1,789	1,379	587	1,966	
Mandalay	.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	356		293	...	...	...	1,092	1,448	3,390	298	3,688	
Mu	..		...	...		...	...	...	...	...	...	...	...	..	...	...	...	...	889	...	584	.	...	.	2,611	3,500	1,946	584	2,530	
Pyinmana	.	...	...	...	15,829*	...	...	...	...	...	...	...	...	...	...	...	...	...	785	..	...	...	...	182	1,044	1,829	4,836	16,011	20,847	* Preliminary traverse surveys extending over 450 square miles of that previously surveyed by local officers.
Southern Shan States ...	...	...	..	..	...	...	...	...	...	...	..	...		...	...	...	...	..	294†	...	387	...	..	...	587	881	2,267	387	2,654	† In addition to this numerous route surveys have been carryed out in the Southern Shan States.
Total Eastern Circle ...	.	..	...	..	15,829	..		...		.	...	...	...	...	...	...	. .	...	2,736	534	2,088	....	..	623	7,524	10,794	15,323	18,540	33,863	
WESTERN CIRCLE.																														
I.—RESERVED FORESTS.																														
Upper Chindwin ...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	231	...	...	...	...	...	...	231	462	...	462	
Lower Chindwin ...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	180	...	...	...	..	...	...	180	360	...	360	
Yaw	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Minbu	...		...	...	...	...	...	...	...	...	.	...	...	...	...	...	..	...	411		...	...	..	...	.	411	881	...	881	
Total Reserved Forests ...	...	...	...	...	...	...	...	..	...	...	...	..	...	...	..	...	...	...	822	...	...	...	...	...		822	1,703	.	1,703	
II.—PROTECTED FORESTS:																														
Upper Chindwin ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	193	600	313	...	...	...	15,900	6,693	386	313	699	
Lower Chindwin ...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,082	445	1,764	...	...	..	1,039	2,566	2,039	1,764	3,803	
Yaw	...	...	...	..	...	...	..	...	...	...	...	...	...	...	...	...	...	...	727	..	733	...	...	...	3,628	4,35[illegible]	1,110	733	1,843	
Minbu		...		..		...	...	...	...	...	...	...	...	...	...	...	..	.	379	118	685	...	...	...	1,288	1,779	811	685	1,496	
Total Protected Forests ...	...	...	...	...	...		...	...	...	...		..	...	...	...		...		2,381	1,157	3,495	.	...	...	11,855	15,393	4,345	3,495	7,841	
III.—UNCLASSED FORESTS.																														
Nil.					...		...	.	.	..		.	..		..	...	...	...	...	...		..	...	..	...	...	...	.	...	
Total Western Circle ...	.		...	...	...	...		...	..	...	..	..	...	.	...	...	...	...	3,203	1,157	3,495	...	...		11,955	16,215	6,049	3,495	9,544	† A-VIII (*c*) 2,678 A-VIII (*d*) 817
Total Eastern Circle ...	8	...		..	15,829	...	...	...	...	...	..	..		...	...	...	...	..	2,736	534	2,088	...	...	623	7,524	10,794	15,323	18,540	33,863	
Total Western Circle ...	...	...	..	...		...	.	..	.	.	...	...	...	...	...	...	...	.	3,203	1,157	3,495	...	...	..	11,855	16,215	6,049	3,495	9,544	Total ... 3,495
GRAND TOTAL UPPER BURMA	.	...	...	...	15,829		...	..	...	...	...	...	...		...	...	...		5,939	1,691	5,583	..	..	623	19,379	27,009	21,372	22,035	43,407	

(*a*) Not including 36 miles boundary survey incomplete. (*b*) [illegible]

FORM NO. 50.—*Statement showing Progress made in Working Plans in the Eastern and Western Circles from 1st April 1892 to 30th June 1893.*

Division.	Areas for which working plans have been completed		Areas for which working plans are being compiled.		Areas for which working plans have still to be taken in hand	Total forest area as in Form No. 46	Entire cost per square mile of working plans completed	Remarks.
	At commencement of the year	During the year	At commencement of the year	Taken in hand during the year				
1	2	3	4	5	6	7	8	
EASTERN CIRCLE	Sq ms.	Sq ms	Sq. ms	Sq ms.	Sq ms	Sq ms.	Rs	
I.—Reserved Forests								
Bhamo	..	...	...	...	36	36	...	
Katha	...	..	...	..	626	626	..	
Pyinmana	...	...		...	785	785	...	
Total Reserved Forests			...	..	1,447	1,447	...	
II.—Protected Forests.								
Bhamo	...	...	...	...	1,311	1,311	...	
Katha	..	...	...	...	1,163	1,163	...	
Mandalay	..	...			1,448	1,448	...	
Mu	...	...	...	..	3,500	3,500	...	
Pyinmana	...	...	...	...	1,044	1,044	..	
Shan States ..		...	...	...	881	881		
Total Protected Forests .	..	...	...	.	9,347	9,347		
Total Eastern Circle ...			.	.	10,794	10,794		
WESTERN CIRCLE								
I.—Reserved Forests.								
Upper Chindwin			...	...	231	231	.	
Lower Chindwin . ..	..	...	.	..	180	180	...	
Minbu			...	..	411	411	..	
Total Reserved Forests .		..		.	822	822		
II.—Protected Forests.								
Upper Chindwin	...	..	..		6,693	6,693	.	
Lower Chindwin	...		...	..	2,566	2,566	...	
Yaw . .	..	...	.	..	4,355	4,355	..	
Minbu	...	...		...	1,779	1,779	...	
Total Protected Forests		...			15,393	15,393	...	
III.—Unclassed Forests								
Nil								
Total Western Circle ...					16,215	16,215	.	
Total Reserved Forests Upper Burma	...	..		...	2,269	2,269	...	
Total Protected Forests Upper Burma .	...	.			24,740	24,740	...	
GRAND TOTAL UPPER BURMA ...		..			27,009	27,009	..	

FORM NO. 51.—*Statement showing Communications and Buildings in the Eastern and Western Circles from 1st April 1892 to 30th June 1893.*

Division.	NEW WORKS UNDERTAKEN DURING THE YEAR.						REPAIRS EXECUTED DURING THE YEAR.						Remarks.
	Buildings.		*Roads and paths.*				*Buildings.*		*Roads and paths.*				
	Description of buildings.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	Total expenditure on new work.	Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	Total expenditure on repairs.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	EASTERN CIRCLE.	Rs.		Miles.	Rs.	Rs.		Rs.		Miles.	Rs.	Rs.	
Bhamo.	Bhamo combined office and dwelling-house, west verandah completed.	46	.....	...	...	...	Re-thatching Bhamo office and out-houses ...	250	.....	...	...	...	
	Planking walls and enlarging office rooms, and planking the north face of bungalow.	532	.....	...	...	...	Renewing fence and clearing compounds ...	161	.....	...	...	411	
	Shwegu revenue office and subdivisional house.	965	.....	...	...	...							
	Addition of two side verandahs and a bath-room.	221	.....	...	...	...							
	Construction of servants' quarters.	72	.....	...	...	...							
	Revenue depôt house, Bhamo...	...	.....	...	...	...	Repairs to depôt buildings	84	.....	...	...	84	
	Total Bhamo ...	1,836	.....	...	...	1,836	.....	1,495	.....	...	...	495	
Katha.	Katha forest house ...	...	.....	...	...	...	Katha forest house	..	.....	...	...	..	
	Substitution of planks for temporary matting walls and painting ceiling.	297	.....	...	...	...	Deepening and cleaning well	280	.....	...	...	...	
	Building three latrines ...	61	.....	...	...	...	Earth-oiling	52	Levelling and clearing road ...	...	8	...	
	Tigyaing forest house ...	...	.....	...	...	...	Re-roofing out-houses	4	.....	...	...	...	
	Building one latrine ...	15	.....	...	...	...	Fencing and clearing compound	763	.....	...	...	...	
	Forest house, Möngmit ...	2,300	New road to forest house, Katha.	...	50	...	Re-roofing Bernardmyo forest house ...	91	.....	...	...	...	
	Forester's house, Ma-ugôn ...	35	.....	...	...	...	Re-roofing Tigyaing forest house partly completed.	157	Levelling and clearing road ...	...	12	...	
	Total Katha ...	2,708	.....	...	50	2,758	Clearing compound	9	.....	...	...	...	
							.....	1,356	.....	...	20	1,376	
Mandalay.	Maymyo subdivisional house and office completed.	870	.....	...	...	...	Repairs to Mandalay house and office ...	67	.....	...	...	...	
	Purchase of Maymyo Rangers' quarters.	160	.....	...	...	...	Fencing and clearing compound ...	157	.....	...	...	...	
	Purchase of Kyaukse subdivisional house and office.	4,000	.....	...	...	...	Repairs to Maymyo subdivisional house and office.	4	Repairs to road ...	...	3	...	
							Fencing and clearing compound ...	62	.....	...	...	...	
							Repairs to Kyaukse subdivisional house and office.	5	.....	...	...	...	
	Total Mandalay ...	5,030	.....	...	...	5,030		295		...	3	298	
	Carried over ...	9,574	.....	...	50	9,624	.....	2,146	.....	...	23	2,169	

FORM NO. 51.—*Statement showing Communications and Buildings in the Eastern and Western Circles from 1st April 1892 to 30th June 1893*—continued.

Division.	NEW WORKS UNDERTAKEN DURING THE YEAR.						REPAIRS EXECUTED DURING THE YEAR.					Remarks.
	Buildings.		*Roads and paths.*			Total expenditure on new works.	*Buildings*		*Roads and paths*		Total expenditure on repairs.	
	Description of buildings.	Expenditure incurred	Road or path and object of the same.	Length of road or path.	Expenditure incurred		Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired	Expenditure incurred	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Rs		Miles.	Rs.	Rs.		Rs.		Miles	Rs.	Rs
Mu	Brought forward ...	9,574	.....	.	50	9,624		2,146		...	23	2,169
	.....	...	.....	...	...	..	*Forest House and Office, Ye-u*					
							Repairs	190	... ..			
							Clearing compound	12	. .			
							Repairs	154	...			
	Total Mu ...	...	... ..	.	...		*Forest House, Pyinmana.*	356		...		356
Pyinmana.	Purchase of a house for Divisional Officer	2,000	.....	...	...		Re-roofing	350	. ...			
	Replacing mat-walling with teak	757	.. ...	...	.		Clearing compound	65	..			
	Forest rest-house, Taungnyo ...	600	.....	...	.	...	*Subdivisional Office, Yamèthin.*					
	Forest rest-house, Minbyin ..	200	. ..	...	..	...	Re-roofing and repairs . .	243	.....			
							Divisional Office, Pyinmana.					
	.....	...	.....	..		..	Repairs	46	.. ..			
							Rest Houses.					
	. ....	...	.....	...	...	...	Repairs	32	.....			
							Well at Aingyi.					
	.....	...	.....	...	..	...	Repairs	48	.....			
	Total Pyinmana ...	3,557	.....	...	..	3,557	..	784	.....	..	..	784
	Total Eastern Circle ...	13,131	.....	..	50	13,181	.....	3,286	.....	...	23	3,309
	WESTERN CIRCLE.											
Direction.	.....	...	.....	...		...	Partitions in new office ..	16	... ..	..	..	16	Total A-VII Rs. 16.
Upper Chindwin	Ranger's house, Maw ...	1,000	.....	..		...	..	...				
	Depôt Forester's house at Kindat.	450	...	..	...		Kindat headquarters bungalow (since burnt) ...	518				
	Kindat bungalow and outhouses	250	... ..	...	...	..	Fencing and clearing compounds	314				
	New headquarters bungalow (commencing foundations).	12	.....	...	...	...	. . .	..				
	Total Upper Chindwin ...	1,712	.....	..	...	1,712	.....	832	.....	..	..	832	Total A-VII Rs. 2,544.
	Carried over ..	1,712	... ..	..	...	1,712	. ...	848		..	...	848	

FORM NO. 51.—*Statement showing Communications and Buildings in the Eastern and Western Circles from 1st April 1892 to 30th June 1893*—concluded.

Division.	New works undertaken during the year.						Repairs executed during the year						Remarks.
	Buildings.		*Roads and paths*			Total expenditure on new works.	*Buildings.*		*Roads and paths.*			Total expenditure on repairs.	
	Description of buildings.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.		Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired	Expenditure incurred.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Rs		Miles	Rs	Rs.		Rs.		Miles	Rs.	Rs.	
	Brought forward ...	1,712		...	...	1,712		848			...	848	
Lower Chindwin.	Mônywa headquarters bungalow out-houses.	62	.....	...	...	..	Mônywa headquarters bungalow	218	Clearing foot-paths over the Pôndaung and Pônnyadaung hills.	3	5	.	
	New office room	350	.....	...	...	...	Fencing and clearing compounds	141	... ...	...	...	...	
	Depôt house and out-houses at Alôn.	656	.....	...	...	...							
	Mingin subdivision headquarters bungalow (in part).	1,928	...		...	...							
	Total Lower Chindwin	2,996	.....	...	...	2,996	.....	359	.....	3	5	364	Total A-VII Rs. 3,360.
Yaw.	Depôt house at Pakôkku ...	299	.....	..	...	...	Repairs to headquarters bungalow and out-houses, Pakôkku	169	Digging and removing obstacles and levelling path, Kyawtha to Bambyin	4	99	...	
	Ranger's house at Pauk ...	500	.....	...	...	...							
	Rest-house at Kabaing ..	199	.....	...	...	..	Fencing and clearing compounds.	35	Cutting bamboos on path, Lindaung to Wabin.	10	4	...	
	Rest-house at Wabin	186	.....	...	...	...							
	Total Yaw ...	1,184	.....	...	...	1,184	.....	204	.....	14	103	307	Total A-VII Rs. 1,491.
Minbu.	Depôt house at Minhla ...	100	Headquarters bungalow	50	7	...	Five chicks for forest house	40		...	...		
	Depôt house at Zigat ...	80	Headquarters office ...	feet.	20	.	Repairs to headquarters bungalow, Minbu ...	146	... ...	..	...	...	
	Durwan's hut, Minbu	160	Draining compound ...	...	1	...	Repairs to headquarters bungalow, Minhla depôt	4	... ...	...	...	...	
	Sedaw rest-house (in part), Minbu	77	.....	...	.		Repairs to headquarters bungalow, Taungdwingyi bungalow and out-houses.	270	.....	...	..	...	
	Taungdwingyi, small office ...	50	..	...	..	...	Earth-oiling, Minbu bungalow	13	.....	...	...	...	
	Taungdwingyi servants' quarters ...	30	.. ...	...	.	...	Earth-oiling, Minhla depôt ...	1	.....	...	...	...	
	Thetkemyaung rest-house, Magwe subdivision	400	... .	...	..	..	Fencing and clearing compounds	305	.....	...	.	...	
	Total Minbu .	897	.....	.	28	925	.....	779	.....	..	..	779	Total A-VII Rs. 1,704.
	Total Western Circle .	6,789	... ..	...	28	6,817		2,190	.....	...	108	2,298	Grand Total A-VII Rs. 9,115.
	Grand Total Upper Burma. ...	19,920	.. ...	...	78	19,998	.....	5,476	.... .	...	131	5,607	

FORM NO. 52.—*Statement showing Breaches of Forest Rules in the Eastern and Western Circles from 1st April 1892 to 30th June 1893.*

Division.		Cases pending from 1891-92.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at the close of year.	Remarks.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		*Convictions.*		*Acquittals.*		*Total.*			
									Cases.	Persons.	Cases.	Persons.	Cases.	Persons.		
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
EASTERN CIRCLE.																
A	Bhamo	1	...	16	...	3	19	20	15	23	4 (a)	5	19	28	1	(a) Includes one case let off with a warning.
	Katha	6	...	10	...	3	13	19	10	14	9 (b)	14	19	28	...	(b) Includes two cases let off with warnings, one case in which defendant absconded, and three cases struck off owing to delay in trial
	Mandalay	4	...	131	...	3	134	138	122	196	14	66	136	262	2	
	Mu	...	...	5	...	1	6	6	4	10	2	3	6	13	...	
	Pyinmana	6	...	41	...	19	60	66	52	187	11	58	63	245	3	
	Southern Shan States	...	...	1	...	...	1	1	...	...	...	...	...	...	1	
	Total	17	...	204	...	29	233	250	203	430	40	146	243	576	7	
B	Bhamo	...	...	28	...	...	28	28	28	28	...	...	28	28	...	
	Katha	...	1	42	...	6	49	49	49	78	...	...	49	78	...	
	Mandalay	...	...	4	...	22	26	26	26	50	...	...	26	50	...	
	Mu	...	...	...	...	4	4	4	4	5	...	...	4	5	...	
	Pyinmana	...	...	59	...	31	90	90	90	379	...	...	90	379	...	
	Southern Shan States	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Total	...	1	133	...	63	197	197	197	540	...	...	197	540	...	
C	Bhamo	...	...	30	...	...	30	30	...	...	...	...	...	...	...	
	Katha	...	...	1	...	...	1	1	...	...	...	...	...	...	...	
	Total	...	...	31	...	...	31	31	...	...	...	...	...	...	...	
Total Eastern Circle	A	17	...	204	...	29	233	250	203	430	40	146	243	576	7	
	B	...	1	133	...	63	197	197	197	540	...	...	197	540	...	
	C	...	...	31	...	...	31	31	...	...	...	...	...	...	...	
WESTERN CIRCLE.																
A	Upper Chindwin	...	...	2	...	...	2	2	...	...	1	1	1	1	1	
	Lower Chindwin	11	...	7	...	3	10	21	13	33	7	13	20	46	1	
	Yaw	...	...	26	...	1	27	27	25	61	2	9	27	70	...	
	Minbu	2	...	14	...	5	19	21	18	67	2	2	20	69	1	
	Total A	13	...	49	...	9	58	71	56	161	12	25	68	186	3	
B	Upper Chindwin	...	...	36	...	3	39	39	39	48	...	...	39	48	...	
	Lower Chindwin	...	...	55	...	7	62	62	62	89	...	...	62	89	...	
	Yaw	...	...	11	...	...	11	11	11	22	...	...	11	22	...	
	Minbu	...	...	3	...	2	5	5	5	14	...	...	5	14	...	
	Total B	...	...	105	...	12	117	117	117	173	...	...	117	173	...	
Total Western Circle	A	13	...	49	...	9	58	71	56	161	12	25	68	186	3	
	B	...	...	105	...	12	117	117	117	173	...	...	117	173	...	
	C	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Total Upper Burma	A	30	...	253	...	38	291	321	259	591	52	171	311	762	10	
	B	...	1	238	...	75	314	314	314	713	...	...	314	713	...	
	C	...	...	31	...	...	31	31	...	...	...	...	...	...	...	
Grand Total		30	1	522	...	113	636	666	573	1,304	52	181	625	1,475	10	

A.—Cases taken into Court. | B.—Cases disposed of under section 67, Indian Forest Act, 1878. | C.—Undetected cases.

FORM NO. 53.—*Statement showing Area of Forest Tracts protected from Fire during the dry Season, 1892-93.*

Division.	Forest tract	Year in which protection commenced.	Area actually protected up to 15th June 1892.	During dry season of 1893.			Cost during the season.	Remarks.
				Area attempted to be protected.	Failures.	Actually protected.		
1	2	3	4	5	6	7	8	9
	EASTERN CIRCLE.		Acres.	Acres.	Acres.	Acres.	Rs.	
Katha	Bernardmyo plantation, nursery, and orchard	1889	7	10	.....	10	32	
	Mogôk plantation and nursery	1889	2	2	.....	2	.....	Protected by plantation coolies.
Mandalay	Maymyo plantation and nursery	1893	.....	15	15	.....	105	
Pyinmana	Yanaung myin	1892	7,040	9,000	45	8,955	743	
	Total	.....	7,049	9,027	60	8,967	880	
	WESTERN CIRCLE.							
	Nil.							
	GRAND TOTAL UPPER BURMA ...	.....	7,049	9,027	60	8,967	880	

FORM No. 54.—*Statement showing Area closed and open to Grazing in the Eastern and Western Circles from 1st April 1892 to 30th June 1893.*

Division.	Area in square miles.						Remarks.
	Closed to all animals.		*Closed to browsers (camels, goats or sheep)*		*Open to all animals.*	Total area.	
	Whole year.	Part of year.	Whole year.	Part of year	Whole year.		
1	2	3	4	5	6	7	8
EASTERN CIRCLE.							
I.—Reserved Forests.							
Bhamo	36	...	(a)	...	...	36	(a) No camels, sheep or goats grazed in any of the forests in this circle.
Katha	549	77 (b)	(a)	...	...	626	
Pyinmana	405	380 (b)	(a)	...	...	785	(b) Figures approximate only.
Total ...	990	457	.	...	...	1,447	
II.—Protected Forests.							
Bhamo	..	...	...	...	1,311	1,311	
Katha	..	...	...	...	1,163	1,163	
Mandalay	...	...	...	...	1,448	1,448	
Mu	...	..	...	...	3,500	3,500	
Pyinmana	...	...	...	...	1,044	1,044	
Southern Shan States ...	...	...	...	...	881	881	
Total ...		..	...	...	9,347	9,347	
Total Eastern Circle ...	990	457	...	...	9,347	10,794	
WESTERN CIRCLE.							
I.—Reserved Forests.							
Upper Chindwin	231	...	...	...	...	231	The areas in which grazing is permitted are those allowed at settlement; they are not necessarily all grazed over and are only open to a fixed maximum number of cattle.
Lower Chindwin	180	...	...	...	...	180	
Yaw	...	...	...	...	...	...	
Minbu	396	5	2 (c)	.	8	411	(c) Closed to goats only
Total ...	807	5	2	...	8	822	
II.—Protected Forests.							
Upper Chindwin	...	...	...	...	6,693	6,693	
Lower Chindwin	...	...	...	...	2,566	2,566	
Yaw	...	...	...	...	4,355	4,355	
Minbu	...	...	...	...	1,779	1,779	
Total ...	...	...	...	...	15,393	15,393	
III.—Unclassed Forests. Nil.							
Total Western Circle ...	807	5	2	...	15,401	16,215	
Total Reserved Forests, Upper Burma.	1,797	462	2	...	8	2,269	
Total Protected Forests, Upper Burma.	...	...	...	...	24,740	24,740	
GRAND TOTAL UPPER BURMA ...	1,797	462	2	...	24,748	27,009	

FORM NO. 55.—*Statement showing Return of Grazing in State Forests in the Eastern and Western Circles from 1st April 1892 to 30th June 1893.*

Division.	Grazing on payment—number of animals.													Grazing free—number of animals.											
	At full rates.						At privileged rates.							By right under settlement.						During pleasure of Government, or otherwise than under settlement.							
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Camels.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Camels.	Other animals.	Fees received. Actual.	Fees received. Value at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Camels.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Camels.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	Grand total of value at full rates.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	29
EASTERN CIRCLE.						Rs.						Rs.	Rs.						Rs. A. P.						Rs.	Rs.	Rs.
Nil.																											
WESTERN CIRCLE																				...	...	...	..	...	...	...	
I.—RESERVED FORESTS.																											
Upper Chindwin	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	
Lower Chindwin	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Yaw	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Minbu	...	...	...	...	...	...	...	...	...	...	...	...	...	1,366(a)		...	...	...	...		...	...	...	...	...	...	
Total Reserved Forests ...	...	..	...	...	...	...	...	...	...	...	...	...	...	1,366		...	...	...	...	...	...	..	...	...	...	...	
II.—PROTECTED FORESTS.																											
Nil.																											
III.—UNCLASSED FORESTS.																											
Nil.																											
GRAND TOTAL RESERVED FORESTS UPPER BURMA. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,366	...	...	...	...	...	...	...	...	...	...	...	...	

(a) Head of cattle 826,—buffaloes 15, and except goats, 300 whole year; 25 six months; 200 three months. Grand total cattle 1,366.

FORM NO. 56 [PRESCRIBED].—*Statement showing Area of Plantations in the Eastern and Western Circles from 1st April 1892 to 30th June 1893.*

Division.	Name of plantation.	Area in acres.				Receipts	Charges	Remarks.
		On 1st April 1892.	Added during the year.	Excluded during the year.	Area on 30th June 1893.	Of the year.		
1	2	3	4	5	6	7	8	9
	EASTERN CIRCLE.					Rs	Rs.	
	Teak-Taungya Plantations							
Pyinmana ...	Aingyè and Yanaungmyin	...	15	.....	15	.....	186	
	Thudawma	.....	26	.....	26	.....	394	
	Nganzat and Zalaung	.....	20	.....	20	.....	288	
	Total teak plantations ...	... ..	61	.. ..	61	.....	868	
	Other Plantations.							
Katha ...	Bernardmyo	3·75	1·5	... -	5 25	.....	1,643	
	Mogôk (cart-road)	2·25	....	.....	2·25	.....	622	
	Total other plantations ...	6·	1·5	.....	7·6	.....	2,265	
	Nurseries, Experiments, and Exotics.							
Katha ...	Bernardmyo	·25	·25	0·2	·3	.. ...	123	
Mandalay ...	Mogôk	·11	.	.....	·11	.....	223	
Bhamo ...	Mâymyo	15·	.....	.....	15·	.....	1,156	
	Bhamo	.....	.....	.....	... .	.....	22	
	Total nurseries, &c. ...	15·36	0·25	0 2	15 41	.....	1,524	
	Orchards.							
Katha ...	Bernardmyo	4	.....	.....	4	..	320	
	Bônchaung	...	.....	....	.....	.. .	26	Value of teak-seed made over to taungya-cultivators for planting in their taungyas by way of compensation for felling teak trees in their yas.
	Total Eastern Circle ...	25 36	62·75	0·2	87·91	.....	5,003	
	WESTERN CIRCLE.							
	Regular Plantations.—Nil.							
	Cultural Operations.							
Minbu	Kwemalaung	.....	58	.....	58	.....	197	*Expenditure*—
	Handauk	. . .	84	...	84			April to June 1892 ... Rs 5
	Natgyi	...	111	.....	111			July 1892 to June 1893 ... 192
	Magyi and Dwè	...	98	.....	98			Total ... 197
	Total Western Circle ...	..	351	.....	351	.....	197	
	GRAND TOTAL UPPER BURMA ...	25·36	413·75	0·2	438·91	.. .	5,200	

FORM NO. 57.—*Statement showing Outturn (in cubic feet solid) of Timber and Fuel in the Eastern and Western Circles for the year 1892-93 (i.e., from 1st April 1892 to 30th June 1893).*

Division.	Description of details.	Timber in the rough logs.					Timber in the rough poles.					Sawn or squared timber.					Miscellaneous.					Fuel.					Total.
		Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Outturn.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
	EASTERN CIRCLE.	C. ft.	C. ft.	C. ft.	C.ft.	C. ft.	C.ft.	C. ft.	C. ft.	C.ft.	C. ft.	C.ft.	C. ft.	C.ft.	C.ft.	C. ft.	C.ft.	C. ft.	C.ft.	C. ft.	C. ft.	C.ft.	C.ft.	C.ft.	C. ft.	C. ft.	C. ft.
Katha ...	I.—RESERVED FORESTS.																									
	.....	...	420,588	13,300	...	433,888		8,680	...	...	8,680	...	...	...	...	...	...	...	...	...	...	...	137,500	...	45,750	183,250	625,818
	II.—PROTECTED FORESTS.																									
Bhamo ...	.....	21,789	1,065,662	23,220	...	1,110,671	...	78,560	6,855	...	85,415	...	40	...	...	40	...	...	...	...	...	...	128,608	...	...	128,608	1,324,734
Katha ...	.....	44,765	1,667,186	87,700	...	1,799,651	...	253,990	...	...	253,990	...	226,962	...	...	226,962	...	2,455	...	...	2,455	...	254,364	...	...	254,364	2,537,422
Mandalay ...	.....	5,234	389,687	5,730	...	400,651	...	257,512	...	...	257,512	...	30,667	...	...	30,667	.	6,873	...	...	6,873	...	1,525,559	...	...	1,525,559	2,221,262
Mu ... A.	.....	69,799	827,954	17,400	...	915,153	...	17,039	...	...	17,039	650	101,645	...	...	102,295	...	75	...	...	75	...	380,181	...	...	380,181	1,414,743
Pyinmana	.....	805	3,436,521	34,108	...	3,461,434	...	46	...	...	46	...	477,699	...	...	477,699	219	9,468	...	...	9,687	...	467,833	...	...	467,833	4,416,699
Southern Shan States.	.....	...	754,000	...	...	754,000	...	..	...	..	...	...	...	...	..	...	...	...	..	...	...	...	...	...	...	...	754,000
	Total	142,392	8,131,010	168,158	...	8,441,560	...	607,147	6,855		614,002	650	837,013	...	...	837,663	219	18,871	...	...	19,090	...	2,756,545	...	...	2,756,545	12,668,860
	III.—UNCLASSED FORESTS. *Nil.*																									
	Total Eastern Circle ...	142,392	8,551,598	181,458	...	8,875,448	...	615,827	6,855	..	622,682	650	837,013	...	...	837,663	219	18,871	...	...	19,090	...	2,894,045	...	45,750	2,939,795	13,294,678
	WESTERN CIRCLE.																									
	I.—RESERVED FORESTS. *Nil.*																									
	II.—PROTECTED FORESTS.																									
	April to June 1892.																									
Lower Chindwin	Teak ...	4,826	5,240	7,280	...	17,446	...	275	...	...	275	...	3,581	...	...	3,581	...	...	...	...	...	...	...	...	...	...	21,302
	Other kinds	849	12,203	...	...	13,052	...	32,316	...	...	32,316	...	7,749	...	...	7,749	...	...	...	...	...	...	850	...	...	850	53,967
Yaw	Teak	...	2,800	18,480	...	21,280	...	...	.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	21,280
	Other kinds	...	...	..	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	200	...	...	200	200
Minbu	Teak	...	3,396	...	...	3,396	...	...	..	...	...	...	2,637	.	...	2,637	...	250	...	...	250	...	...	...	...	...	6,283
	Other kinds	...	...	...	...	...	...	150	.	..	150	...	...	...	...	...	...	...	...	...	...	...	7,800	...	...	7,800	7,950
	Total ...	5,675	23,639	25,860	...	55,174	...	32,741	...	...	32,741	...	13,967	...	...	13,967	..	250	...	...	250	...	8,850	...	...	8,850	110,982

FORM NO. 57.—*Statement showing Outturn (in cubic feet solid) of Timber and Fuel in the Eastern and Western Circles for the year 1892-93*—concluded.

Division.	Description of details.	Timber in the rough logs.					Timber in the rough poles.					Sawn or square timber					Miscellaneous.					Fuel.					Total.
		Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Outturn.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
	II.—Protected Forests—concluded. *July 1892 to June 1893.*	C. ft.	C. ft.	C ft.	C.ft.	C. ft.	C.ft.	C. ft.	C. ft.	C.ft	C. ft.	C.ft.	C.ft.	C.ft.	C.ft	C. ft.	C.ft.	C.ft.	C.ft.	C. it.	C. ft.	C.ft.	C. ft.	C.ft.	C.ft.	C. ft.	C. ft.
Upper Chindwin.	Teak	20	52,404	6,300	...	58,724	...	6,725	..	.	6,725	...	713	...	. .	713	...		...	...	...	...	...	...	...		66,162
	Other kinds	172	42,515	.. ...	...	42,687	...	30,370	...	...	30,370	...	30,973	..	...	30,973	...	...	...	...	...	...	75,009	...	...	75,009	179,039
Lower Chindwin.	Teak	3,187	68,181	169,185	...	240,553	...	3,185	...	...	3,185	...	2,120	...	...	2,120	...	...	..	..	...	...	...	...	...	...	245,858
	Other kinds	1,226	64,060	.....	...	65,386	...	115,495	...	...	115,495	...	23,448	...	...	23,448	...	72	.	...	72	...	236,817	...	...	236,817	441,218
Yaw	Teak	1,965	1,821,830	113,760	...	1,937,555	...	...	...	...	...	...	91	...	...	91	...	...	...	...	...	...	...	...	...	...	1,937,646
	Other kinds	142	...	.....	...	142	...	815	...	...	815	...	...	...	...	...	...	...	...	...	...	...	176,104	...	...	176,104	177,061
Minbu	Teak	15,366	101,609	21,000	...	137,975	...	...	...	...		...	100	...	...	100	...	350	...	...	350	...	...	...	...	...	138,425
	Other kinds	.....	12,600	...	...	12,600	...	5,650	...	...	5,650	...	4,836	...	...	4,836	...	...	...	...	...	...	268,898	...	.	268,898	291,984
	Total	22,178	2,163,199	310,245	...	2,495,622	...	162,240	. .	...	162,240	...	62,281	...	...	62,281	...	422	...	...	422	...	756,828	...	. .	756,828	3,477,393
	II.—Protected Forests. *April 1892 to June 1893.*																										
Upper Chindwin.	Teak	20	52,404	6,300	...	58,724	...	6,725	...	...	6,725	...	713	...	...	713		...	...	...	...	...	...	...	...	...	66,162
	Other kinds	172	42,515		...	42,687	...	30,370	...	...	30,370	...	30,973	...	...	30,973	...		...	...	...	...	75,009	..	...	75,009	179,039
Lower Chindwin.	Teak	8,013	73,421	176,565	...	257,999	...	3,460	...	...	3,460	...	5,701	...	...	5,701	..	...	...	...	...	...	...	...	...	. .	267,160
	Other kinds	2,175	76,263	...	...	78,438	..	147,811	...	...	147,811	...	31,197	...	...	31,197	...	72	...	...	72	...	237,667	...	...	237,667	495,185
Yaw	Teak	1,965	1,824,630	132,240	...	1,958,835	...	...	...	. .	...	..	91	.	...	91		...	...	...	...	...	...	...	...	...	1,958,926
	Other kinds	142	...	...	...	142	...	815	...	...	815	...	...	.	...	...	...	.	...	...	...	...	176,304	...	...	176,304	177,261
Minbu	Teak	15,366	105,005	21,000	...	141,371	...	.	...	...	...	...	2,737	...	...	2,737	...	600	...	...	600	...	...	...	...	...	144,708
	Other kinds	...	12,600	...	...	12,600	...	5,800	...	...	5,800	...	4,836	...	..	4,836	...	.	..	...	...	...	276,698	...	...	276,698	299,934
	Total ...	27,853	2,186,838	336,105	..	2,550,796	...	194,981	.	...	194,981	...	76,248	...	...	76,248	...	672	...	...	672	...	765,678	...	...	765,678	3,588,375
	III.—Unclassed Forests. *Nil.*														...	...		.	. .	.	.	. .	.				...
	Total Western Circle ...	27,853	2,186,838	336,105	...	2,550,796	...	194,981	...	...	194,981	...	76,248	..	...	76,248	...	672	...	...	672	...	765,678	...	...	765,678	3,588,375
	Grand Total Upper Burma	170,245	20,738,436	517,563	...	11,426,244	...	810,808	6,855	...	817,663	650	913,261		...	913,911	219	19,543	.	...	19,762	...	3,659,723	...	45,750	3,705,473	16,883,053

FORM NO. 58.—*Statement showing Outturn of Minor Forest Produce in the Eastern and Western Circles from 1st April 1892 to 30th June 1893.*

Division.	Description of produce.	Produce removed or utilized.										Remarks
		By Government agency.		*By purchasers*		*By free grants.*		*By right-holders*		*Total.*		
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
1	2	3	4	5	6	7	8	9	10	11	12	13
	EASTERN CIRCLE.		Rs		Rs.		Rs		Rs		Rs.	
Bhamo	Bamboos No	...	...	436,925	1,559	...	...	...	...	436,925	1,559	
	Canes "	...	...	993,305	1,393	...	...	...	...	993,305	1,393	
	Caoutchouc Viss	...	...	341,498	2,19,498	...	...	...	...	341,498	2,19,498	
	Resin "	...	...	7,580	151	...	...	...	...	7,580	151	One hundred viss per permit.
	Shaw fibre "	...	..	1,100	22	...	...	...	...	1,100	22	
	Elephant tusks "	...	...	26	52	...	...	...	...	26	52	
	Limestone "	...	...	500	10	...	...	...	..	500	10	One hundred viss per permit,
	Honey "	...	...	50	10	...	...	...	...	50	10	Ten viss per permit.
	Total ...	...	...	...	2,22,595	...	...	...	...	...	2,22,595	
Katha	Bamboos No.	...	...	6,205,369	16,467		...	...	...	6,205,369	16,467	
	Canes "	...	...	1,399,125	1,155	...	...	...	...	1,399,125	1,155	
	Cutch Cauldrons	...	...	39	2,220	...	...	...	...	39	2,220	
	Wood-oil Viss	...	...	300	6	...	...	...	...	300	6	
	Thitsi "	...	...	6,900	159	...	...	...	...	6,900	159	One hundred viss per permit.
	Resin "	...	...	6,300	133	...	...	...	...	6,300	133	
	Honey and wax "	...	...	330	66	...	...	...	...	330	66	Ten viss per permit.
	Limestone "	...	...	8,400	240	...	...	...	...	8,400	240	
	Whetstone "	...	...	3,000	60	...	...	...	...	3,000	60	One hundred viss per permit.
	Shaw fibre "	...	...	16,800	336	...	...	...	...	16,800	336	
	Bark "	...	...	1,700	34	...	...	...	...	1,700	34	
	Hunting License	...	...	1	10	...	...	...	...	1	10	
	Total ...	...	...	...	20,886	...	...	...	...	...	20,886	
Mandalay	Bamboos No.	...	...	3,190,822	6,371	...	...	...	...	3,190,822	6,371	
	Canes "	...	...	118,300	93	...	...	...	...	118,300	93	
	Wood-oil Viss	...	...	9,100	182		...	...	...	9,100	182	One hundred viss per permit.
	Thitsi "	...	...	100	5	...	...	...	...	100	5	
	Resin "	...	...	500	10	...	...	...	...	500	10	
	Honey "	...	...	120	24	...	...	...	...	120	24	Ten viss per permit
	Limestone "	...	...	1,200	32	...	...	...	...	1,200	32	One hundred viss per permit.
	Shaw fibre "	...	...	2,700	54	...	...	...	...	2,700	54	
	Stacklac License	...	...	66	132	...	...	...	...	66	132	
	Miscellaneous "	...	...	68	136	...	...	...	...	68	136	
	Total ...	...	...	...	7,039	...	...	...	...	...	7,039	

Mu	Bamboos	No.	...	...	3,098,680	5,846	...	...	...	...	3,098,680	5,846		
	Canes	,,	...	...	130,800	92	...	...	...	...	130,800	92		
	Cutch	Cauldrons	...	...	88	5,040	...	...	...	...	88	5,040		
	Thitsi	Viss	...	...	49,300	992	...	...	...	...	49,300	992	One hundred viss per permit.	
	Resin	,,	...	...	24,000	480	...	...	...	...	24,000	480		
	Honey and wax	,,	...	...	420	69	...	...	...	...	420	69	Ten viss per permit and 100 viss.	
	Limestone	,,	...	...	800	16	...	...	...	...	800	16		
	Shaw fibre	,,	...	...	7,470	145	...	...	...	...	7,470	145	One hundred viss per permit and 570 viss.	
	Thanaka bark	,,	...	...	1,600	32	...	...	...	...	1,600	32		
	Miscellaneous	,,	...	...	500	6	...	...	...	...	500	6		
	Total ...		...	...	...	12,718	...	...	...	...	...	12,718		
Pyinmana	Bamboos	No.	...	...	365,499	859	...	...	...	...	365,499	859		
	Canes	,,	...	...	434,452	713	...	...	...	...	434,452	713		
	Cutch	Cauldrons	...	...	150	3,010	...	...	...	...	150	3,010	One hundred viss per permit.	
	Thitsi	Viss	...	...	17,300	379	...	...	...	...	17,300	379		
	Resin	,,	...	...	1,000	20	...	...	...	...	1,000	20		
	Honey and wax	,,	...	...	40	8	...	...	...	...	40	8	Ten viss per permit.	
	Limestone	,,	...	...	2,400	48	...	...	...	...	2,400	48	One hundred viss per permit.	
	Shaw fibre	,,	...	...	17,600	784	...	...	...	...	17,600	784		
	Miscellaneous	,,	...	...	2	4	...	...	...	...	2	4		
	Total ...		...	...	...	5,825	...	...	...	...	...	5,825		
	TOTAL EASTERN CIRCLE ...		...	...	...	269,063	...	...	...	...	...	2,69,063		
	WESTERN CIRCLE. APRIL TO JUNE 1892.													
Lower Chindwin ...	Bamboos	No.	...	...	1,125,078	2,895	...	...	...	...	1,125,078	2,895		
	Canes	,,	...	...	1,182,752	880	...	...	...	...	1,182,752	880		
	India-rubber	Viss	...	...	2,801	1,401	...	...	...	...	2,801	1,401		
	Shaw	,,	...	...	900	18	...	...	...	...	900	18		
	Wood-oil	,,	...	...	2,300	46	...	...	...	...	2,300	46		
	Honey and wax	,,	...	...	90	18	...	...	...	...	90	18		
	Total ...		...	...	...	5,258	...	...	...	...	...	5,258		
Yaw	Cutch	Viss	...	...	127,500	3,180	...	...	...	...	127,500	3,180		
	Thanaka bark	,,	...	...	300	6	...	...	...	...	300	6		
	Thitya	,,	...	...	100	2	...	...	—		100	2		
	Total ...		...	...	...	3,188	...	...	...	...	...	3,188		
Minbu	Bamboos	No.	...	...	13,500	35	...	...	...	...	13,500	35		
	Cutch	Viss	...	...	257,500	8,140	...	...	...	...	257,500	8,140		
	Lime	,,	...	...	900	18	...	...	...	...	900	18		
	Wood-oil	,,	...	...	300	6	...	...	...	...	300	6		
	Total		...	...	...	8,199	...	...	...	...	...	8,199		
	TOTAL OF THE WESTERN CIRCLE FROM APRIL TO JUNE 1892.													
	Bamboos	No.	...	...	1,138,578	2,930	...	...	...	...	1,138,578	2,930		
	Canes	,,	...	...	1,182,752	880	...	...	...	...	1,182,752	880		
	India-rubber	Viss	...	...	2,801	1,401	...	...	...	...	2,801	1,401		
	Cutch	,,	...	...	385,000	11,320	...	...	...	...	385,000	11,320		
	Shaw fibre	,,	...	...	900	18	...	...	...	...	900	18		
	Wood-oil	,,	...	...	2,600	52	...	...	...	...	2,600	52		
	Honey and wax	,,	...	...	90	18	...	...	...	...	90	18		
	Thanaka bark	,,	...	...	300	6	...	...	...	...	300	6		
	Thitya	,,	...	...	100	2	...	...	...	...	100	2		
	Lime	,,	...	...	900	18	...	...	...	...	900	18		
	Total		...	...	...	16,645	...	...	...	...	...	16,645		

FORM NO. 58.—*Statement showing Outturn of Minor Forest Produce in the Eastern and Western Circles from 1st April 1892 to 30th June 1893*—concld.

Division	Description of produce		PRODUCE REMOVED OR UTILIZED.										Remarks
			By Government agency.		*By purchasers.*		*By free grants.*		*By right-holders.*		*Total.*		
			Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
1	2		3	4	5	6	7	8	9	10	11	12	13
	JULY 1892 TO JUNE 1893.			Rs.		Rs.		Rs.		Rs.		Rs.	
Upper Chindwin	Bamboos	No.	...	...	2,823,353	4,569	...	...	...	...	2,823,353	4,569	
	Canes	,,	...	...	5,813,824	3,972	...	...	...	...	5,813,824	3,972	
	India-rubber	Viss	...	...	4,643	3,487	...	...	...	...	4,643	3,487	
	Cutch	,,	...	...	...	...	...	...	...	...	...	..	
	Thitsi	,,	...	...	500	10	...	...	...	...	500	10	
	Shaw fibre	,,	...	...	2,896	57	...	...	...	...	2,896	57	
	Honey and wax	,,	...	...	1,726	447	...	...	...	...	1,726	447	
	Indwe	,,	...	...	20	4	...	...	...	...	20	4	
	Dammer	,,	...	...	71	5	...	...	...	...	71	5	
	Kimpunthi fruit	,,	...	...	726	7	...	...	...	...	726	7	
	Bamboo cigar-leaves	,,	...	...	176	11	...	...	...	...	176	11	
	Yôn	,,	...	...	13,250	55	...	...	...	...	13,250	55	
	Miscellaneous	,,	...	...	...	74	...	...	...	...	...	74	
		Total ...	...	...	..	12,698	...	...	...	...	...	12,698	
Lower Chindwin	Bamboos	No.	...	..	2,694,961	8,178	...	...	...	...	2,694,961	8,178	
	Canes	,,	100,000	832	3,957,200	3,356	...	...	...	...	4,057,200	4,188	
	India-rubber	Viss	...	...	9,835	4,917	...	...	...	...	9,835	4,917	
	Cutch	,,	...	..	1,016,775	28,320	...	...	...	...	1,016,775	28,320	
	Shaw fibre	,,	...	...	3,200	64	...	...	...	...	3,200	64	
	Wood-oil	,,	...	...	16,800	336	...	...	...	...	16,800	336	
	Thitsi	,,	...	...	13,900	551	...	...	...	...	13,900	551	
	Thitya bark	,,	...	...	500	10	...	...	...	...	500	10	
	Limestone	,,	...	...	1,700	34	...	...	...	...	1,700	34	
	Honey and wax	,,	...	...	10	2	...	...	...	...	10	2	
	Indwe	,,	...	...	90	18	...	...	...	...	90	18	
	Dammer	,,	...	...	10	2	...	...	...	...	10	2	
	Yôn	,,	...	...	9,150	47	...	...	...	...	9,150	47	
	Tè bark extract	,,	...	...	1,500	60	...	...	...	...	1,500	60	
	Miscellaneous	,,	...	...	...	29	...	...	...	...	...	29	
		Total ...	...	832	...	45,924	...	...	...	...	...	46,756	
Yaw	Bamboos	No.	...	...	780	3	...	...	...	...	780	3	
	Canes	,,	...	...	28,900	36	...	...	...	...	28,900	36	
	Cutch	Viss	...	...	612,500	15,690	...	...	...	...	612,500	15,690	
	Shaw fibre	,,	..	...	3,200	64	...	...	...	...	3,200	64	
	Wood-oil	,,	...	...	1,300	26	...	...	...	...	1,300	26	
	Thanaka bark	,,	...	...	14,000	280	...	...	...	...	14,000	280	
	Thitya	,,	...	...	61,900	1,238	...	...	...	...	61,900	1,238	
	Limestone	,,	...	...	900	18	...	...	...	...	900	18	
	Thtkkè	,,	...		200	4	...	...	...	...	200	4	
	Lac	,,	...	...	1,200	24	...	...	...	...	1,200	24	
		Total ...	...	...	...	17,383	...	...	..	.	...	17,383	

Bamboos	...	...	No.	...	...	1,728,894	4,421	...	...	...	...	1,728,894	4,421
Canes	...	...	,,	...	...	22,900	32	...	...	...	..	22,900	32
India-rubber	...	...	Viss	...	...	...	12	...	...	...	...	...	12
Cutch	...	...	,,	...	...	1,040,000	27,300	...	...	...	...	1,040,000	27,300
Shaw	...	...	,,	...	...	2,200	44	...	...	...	...	2,200	44
Wood-oil	...	...	,,	...	...	4,600	98	...	...	...	...	4,600	98
Thitsi	...	...	,,	...	...	100	5	...	...	...	...	100	5
Limestone	...	...	,,	...	...	1,300	26	...	...	...	...	1,300	26
Thanaka bark	...	...	,,	...	...	400	8	...	...	...	...	400	8
Thitya	...	...	,,	...	...	600	12	...	...	...	...	600	12
Honey and wax	...	...	,,	...	...	300	11	...	...	...	...	300	11
Indwè	...	...	,,	...	...	10	2	...	...	...	...	10	2
Lac	...	...	,,	...	...	1,085	32	...	...	...	...	1,085	32
Total			...	...	...	...	32,003	...	...	...	...	...	32,003
Total July 1892 to June 1893			...	...	832	...	1,08,008	...	...	...	...	...	1,08,840
TOTAL OF THE WESTERN CIRCLE FROM APRIL 1892 to JUNE 1893.													
Bamboos	...	...	No	...	...	8,386,566	20,101	...	...	...	...	8,386,566	20,101
Canes	...	...	,,	1,00,000	832	11,015,576	8,276	...	...	...	...	11,115,576	9,108
India-rubber	...	...	Viss	...	...	17,279	9,805	...	...	...	...	17,279	9,805
Cutch	...	...	,,	...	...	3,054,275	82,630	...	...	...	...	3,054,275	82,630
Thitsi	...	...	,,	...	...	14,500	566	...	...	...	...	14,500	566
Shaw fibre	...	...	,,	...	...	12,396	247	...	...	...	...	12,396	247
Honey and wax	...	...	,,	...	...	2,126	478	...	...	...	...	2,126	478
Indwè	...	...	,,	...	...	120	24	...	...	...	...	120	24
Dammer	...	...	,,	...	...	81	7	...	...	...	...	81	7
Kimpunthi fruit	...	...	,,	...	...	726	7	...	...	...	...	726	7
Bamboa cigar-leaves	...	...	,,	...	...	176	11	...	...	...	...	176	11
Yón	...	...	,,	...	...	22,400	102	...	...	...	...	22,400	102
Wood-oil	...	...	,,	...	...	25,300	512	...	...	...	...	25,300	512
Thitya bark	...	...	,,	...	...	63,100	1,262	...	...	...	...	63,100	1,262
Limestone	...	...	,,	...	...	4,800	96	...	...	...	...	4,800	96
Tè bark extract	...	...	,,	...	...	1,500	60	...	...	...	...	1,500	60
Thanaka bark	...	...	,,	...	...	14,700	294	...	...	...	...	14,700	294
Thetkè	...	...	..	...	...	200	4	...	...	...	...	200	4
Lac	...	...	,,	...	...	2,285	56	...	...	...	...	2,285	56
Miscellaneous	...	..	,,	...	...	...	115	...	...	...	...	...	115
Total Western Circle			...	...	832	...	1,24,653	...	..	...	...	...	1,25,485
Total Eastern Circle			...	...	...	...	2,69,063	...	...	...	...	...	2,69,063
GRAND TOTAL UPPER BURMA			...	...	832	...	3,93,716	...	...	...	...	...	3,94,548

FORM No. 59 [PRESCRIBED].—*Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts or sold locally in the Eastern and Western Circles from 1st April 1892 to 30th June 1893.*

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.	Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.
EASTERN CIRCLE.					**EASTERN CIRCLE.**				
ACCOUNT OF GOVERNMENT TIMBER.					ACCOUNT OF GOVERNMENT TIMBER.				
In hand at the commencement of the year.					*Disposals during the year.*				
Katha—					Teak logs (sold) ...	4,180	119,460		
Teak (lapsed drift) ...	553	10,282			Teak scantlings, sleepers, and byats (sold)	683	619		
Teak (Maung Bauk's lapsed logs).	87	5,375			Other logs (sold) ...	44	567		
Mandalay—					Other wood, scantlings (sold).	35	50		
Teak	12	1,186			Teak logs (used departmentally).	82	3,456		
Other woods	11	299			Teak logs (drifted away) ...	80	4,170		
Bhamo—					Other logs (drifted away) ...	1	20		
Logs, teak	77	3,652			Other logs (written off as unsaleable).	3	40		
Mu—					Teak logs (lost by re-measurement).	...	629		
Teak	95	2,416			Baing logs (given to Irrawaddy Flotilla Company for experiments).	20	600		
Teak scantlings... ...	1,550	3,101						5,128	129,611
Other woods	8	202			*Balance in hand at the end of the year.*				
			2,393	35,513	Bhamo—				
Received in Depôt during the year.					Teak	62	1,022		
Teak logs (lapsed drift) ...	1,701	50,922			Katha—				
Other logs (lapsed drift) ...	13	224			Teak	66	2,202		
Teak logs (confiscated) ..	2,555	65,538			Mandalay—				
Teak scantlings, sleepers, and byats (confiscated).	1,093	819			Teak	68	3,214		
Other logs (confiscated) ...	30	240			Katha logs, teak ...	767	29,282		
Other wood, scantlings (confiscated).	35	50			Mu—				
Teak logs (Maung Bauk's lapsed to Government).	260	16,654			Teak	378	9,804		
Teak logs (Government extraction).	343	7,621			Teak scantlings ...	1,960	3,301		
Teak logs (obtained by re-measurement).	...	593			Other logs	13	318		
Baing logs (Government extraction).	20	600						3,314	49,163
			6,049	143,261	Total ...	...	...	8,442	178,774
Total ...	...	...	8,442	178,774					
ACCOUNT OF DRIFT TIMBER.					ACCOUNT OF DRIFT TIMBER.				
Balance at commencement of the year.					*Made over to claimants.*				
Katha—					Teak logs	1,922	52,475		
Teak	8	240			*Transferred to Government account.*				
Mu—					Teak logs	1,701	50,922		
Teak	141	3,666			Other logs	13	224		
			149	3,906	*Went adrift.*				
Collected during the year.					Teak logs	35	677		
Bhamo—								3,670	104,298
Teak	405	9,393			*Balance at the end of the year.*				
Katha—					Bhamo—				
Teak	1,683	50,851			Teak	102	2,980		
Other logs	16	480			Katha—				
Mandalay—					Teak	60	1,800		
Teak	286	12,941			Other logs	16	480		
Other logs	9	208			Mandalay—				
Mu—					Teak	52	2,660		
Teak	2,028	52,077			Other logs	3	140		
Other logs	6	156			Mu—				
			4,433	126,106	Teak	679	17,654	912	25,714
Total ...	...	...	4,582	130,012	Total ...	...	...	4,582	130,012
WESTERN CIRCLE.					**WESTERN CIRCLE.**				
APRIL TO JUNE 1892.					APRIL TO JUNE 1892.				
ACCOUNT OF GOVERNMENT TIMBER.					ACCOUNT OF GOVERNMENT TIMBER.				
In hand at commencement of the year.					*Disposals.*				
Teak logs—					Teak logs (locally sold)	226	4,543		
Lower Chindwin division ...	1	29			Other kind (locally sold) ...	109	666		
Yaw division	4	70						335	5,209
Minbu division	3	140							
			8	239					
Received in depôt—					Balance in hand on 30th June 1892.	56	705	56	705
Teak logs (lapsed drift) ...	268	4,826							
Other kinds (lapsed drift) ...	115	849							
			383	5,675					
Total ...	...	...	391	5,914	Total ...	...	...	391	5,914

FORM No. 59 [PRESCRIBED]—*Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts or sold locally in the Eastern and Western Circles from 1st April 1892 to 30th June 1893*—continued.

Particulars	Number or quantity	Cubic feet	Total of each head. Number or quantity	Total of each head. Cubic feet	Particulars	Number or quantity	Cubic feet	Total of each head. Number or quantity	Total of each head. Cubic feet
WESTERN CIRCLE—continued.					WESTERN CIRCLE—continued.				
JULY 1892 TO JUNE 1893					JULY 1892 TO JUNE 1893.				
Balance in hand on 1st July 1892					*Disposals during the year.*				
					Teak logs (locally sold) ..	569	13,097		
Teak logs—					Other kinds (locally sold)	183	1,650		
Lower Chindwin division .	43	312			Teak logs (departmentally used)	14	603		
Yaw division ...	4	70							
Minbu division	3	140			Teak logs (drifted away)	1	10		
Other kinds—								767	15,360
Lower Chindwin division ...	6	183			*Balance in hand at end of the year*				
			56	705	Teak logs—				
Received in depôt during the year—					Upper Chindwin division ..	1	20		
Teak logs (lapsed drift) .	427	12,098			Yaw division .	3	"		
Other kinds (lapsed drift)	186	1,640			Minbu division ...	147	7,330		
Teak logs (rejected by Messrs The Bombay Burma Trading Corporation, Limited)	24	379			Other kinds—				
Teak logs (from Yaw forests).	221	7,876							
Teak logs (confiscated) ..	13	185			Upper Chindwin division ..	9	173		
			871	22,178				160	7,523
Total	..		927	22,883	Total .			927	22,883
Canes	100,000		100,000	..	Canes sold to Jail Department	100,000		100,000	...
APRIL 1892 TO JUNE 1893					APRIL 1892 TO JUNE 1893				
In hand at commencement of the year					*Disposals.*				
					Teak logs (sold) ...	795	17,640		
Teak logs—					Other kinds (sold) .	292	2,316		
					Teak logs (departmentally used)	14	603		
Lower Chindwin division .	1	29							
Yaw division	4	70			Teak logs (drifted away) ..	1	10		
Minbu division ...	3	140						1,102	20,569
			8	239	*Balance in hand at end of the year*				
Received in depôt—					Teak logs—				
Teak logs (lapsed drift) ..	695	16,924							
Other kinds (lapsed drift) .	301	2,489			Upper Chindwin division ...	1	20		
Teak logs (rejected by Messrs The Bombay Burma Trading Corporation, Limited)	24	379			Yaw division .. .	3	..		
					Minbu division	147	7,330		
Teak logs (from Yaw forests)	221	7,876			Other kinds—				
Teak logs (confiscated) ..	13	185			Upper Chindwin division ...	9	173	160	7,523
			1,254	27,853					
Total Timber ...		...	1,262	28,092	Total Timber ...	...		1,262	28,092
Canes	100,000	...	100,000	...	Canes sold to Jail Department	100,000		100,000	...
APRIL TO JUNE 1892					APRIL TO JUNE 1892.				
Account of Drift Timber.					*Account of Drift Timber.*				
Balance at commencement of the year—									
Teak logs—									
Lower Chindwin division	268	4,829							
Yaw division	1	17							
Minbu division	34	1,360							
Other kinds—									
Lower Chindwin division .	115	846							
			418	7,052					
Collected					*Disposals.*				
					Transferred to Government accounts.				
Teak logs—					Teak logs—				
Lower Chindwin division ...	20	290			Lower Chindwin division ...	268	4,826		
Yaw division .	14	800			Other kinds—				
Minbu division	20	800			Lower Chindwin division	115	849		
					Made over to claimants—				
Other kinds—					Other kinds .	58	464	441	6,139
Lower Chindwin division ...	210	1,680			Balance on 30th June 1892	241	4,483	241	4,483
			264	3,570					
Total			682	10,622	Total ...	..	...	682	10,622

FORM NO. 59 [PRESCRIBED]—*Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts or sold locally in the Eastern and Western Circles for the year 1892-93.*—concluded.

Particulars.	Number or quantity.	Cubic feet.	TOTAL OF EACH HEAD. Number or quantity.	TOTAL OF EACH HEAD. Cubic feet.
WESTERN CIRCLE—concluded.				
JULY 1892 TO JUNE 1893.				
Balance in hand on 1st July 1892.				
Teak logs—				
Lower Chindwin division ...	20	293		
Yaw division	15	817		
Minbu division	54	2,160		
Other kinds—				
Lower Chindwin division ...	152	1,213		
			241	4,483
Collected during the year.				
Teak logs—				
Upper Chindwin division ...	1	20		
Lower Chindwin division ...	335	5,025		
Yaw division	505	26,572		
Minbu division	2,295	92,861		
			3,136	124,478
Other kinds—				
Upper Chindwin division ...	9	172		
Lower Chindwin division ...	25	* 200		
Yaw division	6	142		
			40	514
Total ...	...	...	3,417	129,475
APRIL 1892 TO JUNE 1893.				
Account of drift Timber.				
Balance at commencement of the year.				
Teak logs—				
Lower Chindwin division ...	268	4,829		
Yaw division	1	17		
Minbu division	34	1,360		
Other kinds—				
Lower Chindwin division ...	115	846		
			418	7,052
Collected.				
Teak logs—				
Upper Chindwin division ...	1	20		
Lower Chindwin division ...	355	5,315		
Yaw division	519	27,372		
Minbu division	2,315	93,661		
Other kinds—				
Upper Chindwin division ...	9	172		
Lower Chindwin division ...	335	1,880		
Yaw division	6	142		
Minbu division	...	...		
			3,440	128,562
Total ...	...	...	3,858	135,614

Particulars.	Number or quantity.	Cubic feet.	TOTAL OF EACH HEAD. Number or quantity.	TOTAL OF EACH HEAD. Cubic feet.
WESTERN CIRCLE—concluded.				
JULY 1892 TO JUNE 1893.				
Disposals.				
Transferred to Government Account.				
Teak logs—				
Upper Chindwin division ..	1	20		
Lower Chindwin division ...	207	3,107		
Yaw division	67	1,481		
Minbu division	152	7,490		
Other kinds—				
Upper Chindwin division ...	9	172		
Lower Chindwin division ...	171	1,326		
Yaw division	6	142		
			613	13,738
Made over to claimants.				
Teak logs—				
Lower Chindwin division ...	105	1,536		
Yaw division	439	25,056		
Minbu division	1,462	58,494		
Other kinds—				
Lower Chindwin division ...	4	71		
			2,010	85,157
* *Went adrift.*				
Teak logs, Yaw division ...	1	10		
			1	10
Balance at end of the year.				
Teak logs—				
Lower Chindwin division ...	43	675		
Yaw division	13	878		
Minbu division	735	28,991		
Other kinds—				
Lower Chinwin division ...	2	16	793	30,56c
Total ...	...	...	3,417	129,475
APRIL 1892 TO JUNE 1893.				
Account of Drift Timber.				
Disposals.				
Transferred to Government Account.				
Teak logs—				
Upper Chindwin division ...	1	20		
Lower Chindwin division ...	475	7,933		
Yaw division	67	1,481		
Minbu division	152	7,490		
Other kinds—				
Upper Chindwin division ...	9	172		
Lower Chindwin division ...	* 286	2,175		
Yaw division	6	142		
			996	19 413
Made over to claimants.				
Teak logs—				
Lower Chindwin division ...	105	1,536		
Yaw division	439	25,066		
Minbu division	1,462	58,494		
Other kinds—				
Lower Chindwin division ...	62	535		
Went adrift.				
Teak logs, Yaw division ...	1	10	2,068	85,631
			1	10
Balance at end of the year.				
Teak logs—				
Lower Chindwin division ...	43	675		
Yaw division	13	878		
Minbu division	735	28,991		
Other kinds—				
Lower Chindwin division ...	2	16		
			793	30,56 1
Total ...	...	...	3,858	135,614

FORM NO 59A.—*Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts or sold locally in the Eastern and Western Circles from 1st April 1892 to 30th June 1893.*

Particulars	Eastern circle.		Western circle.		Total of each head.	
	Number or quantity	Cubic feet.	Number or quantity	Cubic feet	Number or quantity	Cubic feet.
1	2	3	4	5	6	7
ACCOUNT OF GOVERNMENT TIMBER.						
Opening balance	2,393	35,513	8	239	2,401	35,752
Received in Depôts—						
Teak logs (lapsed drift)	1,701	50,922	695	16,924	2,396	67,846
Other kinds (lapsed drift)	12	224	301	2,489	313	2,713
Teak logs (confiscated)	2,555	65,538	13	185	2,568	65,723
Teak scantlings, sleepers, and byats (confiscated)	1,093	819	..	...	1,093	819
Other kinds (confiscated)	30	249	...	..	30	240
Other kinds, scantlings (confiscated)	35	50	...	.	35	50
Teak logs (Maung Bauk's lapsed to Government)	260	16,654	..	...	260	16,654
Teak logs (Government extraction)	343	7,621	.	...	343	7,621
Teak logs (obtained by re-measurement)		593	..	...		593
Baing logs (Government extraction)	20	600		..	20	600
Teak logs (rejected by Messrs The Bombay Burma Trading Corporation, Limited).	...	...	24	379	24	379
Teak logs (from Yaw forest)	...	...	221	7,876	221	7,876
Total timber	8,442	178,774	1,262	28,092	9,704	206,866
Received in Depôts— Canes		..	100,000		100,000	
ACCOUNT OF DRIFT TIMBER.						
Opening Balance	149	3,906	418	7,052	567	10,958
Collected during the year—						
Teak logs	4,402	125,362	3,190	126,368	7,592	251,630
Other kinds	31	844	250	2,194	281	3,038
Total	4,582	130,012	3,858	135,614	8,440	265,626

Particulars	Eastern circle		Western circle		Total of each head.	
	Number or quantity.	Cubic feet	Number or quantity	Cubic feet.	Number or quantity	Cubic feet
1	2	3	4	5	6	7
ACCOUNT OF GOVERNMENT TIMBER.						
Sold locally—						
Teak logs	4,180	119,460	795	17,640	4,975	137,100
Other kinds	44	567	292	2,316	336	2,883
Teak scantlings, sleepers, and byats	683	619	.	...	683	619
Other kinds, scantlings	35	50		..	35	50
Used departmentally—						
Teak logs	82	3,456	14	603	96	4,059
Drifted away—						
Teak logs	80	4,170	1	10	81	4,180
Other kinds	1	20		..	1	20
Written off as unsaleable—						
Other kinds	3	40	...	..	3	40
Lost by re-measurement—						
Teak logs	.	629	...	..	.	629
Given to Irrawaddy Flotilla Company for experiment—						
Baing logs	20	600	...	..	20	600
Closing Balance—						
Teak logs	1,341	45,524	151	7,350	1,492	52,874
Teak scantlings	1,960	3,301	..	..	1,960	3,301
Other kinds	13	338	9	173	22	511
Total timber	8,442	178,774	1,262	28,092	9,704	206,866
Sold locally— Canes	..	..	100,000		100,000	..
ACCOUNT OF DRIFT TIMBER.						
Made over to claimants—						
Teak logs	1,922	52,475	2,006	85,096	3,928	137,571
Other kinds	.		62	535	62	535
Transferred to Government Account—						
Teak logs	1,701	50,922	695	16,924	2,396	67,846
Other kinds	12	224	301	2,489	313	2,713
Went adrift—						
Teak logs	35	677	1	10	36	687
Closing balance—						
Teak logs	893	25,094	791	30,544	1,684	55,638
Other kinds	19	620	2	16	21	636
Total	4,582	130,012	3,858	135,614	8,440	265,626

FORM NO. 60 [PRESCRIBED.]—*Abstract showing the Value and other Produce at Sale Depôts in the Eastern and Western Circles from 1st April 1892 to 30th June 1893.*

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	No.	Cubic feet.	Value.	No.	Cubic feet.	Value.	In favour of the year.	Against the year.	
1	2	3	4	5	6	7	8	9	10
EASTERN CIRCLE.			Rs.			Rs.	Rs.	Rs.	
Bhamo—									
Teak logs	77 (a)	3,652	1,826	62	1,022	348	...	1,578	(a) At Mandalay.
Katha—									
Teak logs	640	24,657	7,091	66	2,202	530	8,136	...	
				767 (b)	29,282	14,697			(b) At Mandalay.
Mandalay—									
Teak logs	12	1,186	593	68	3,214	1,607	1,008	...	
Other logs	11	299	6	...	...	...			
Mu—									
Teak logs	95	2,416	475	378	9,804	2,352	2,127	...	
Teak scantlings... ...	1,550	3,101	1,000	1,960	3,301	1,240			
Other logs	8	202	16	13	338	26			
Pyinmana—	...	...	...	...	...	...	...	...	
Total Eastern Circle ...	2,393	33,513	10,997	3,314	49,163	20,600	9,693	...	
WESTERN CIRCLE.									
From 1st April to 30th June 1892.									
Teak logs...	8	239	217	50	382	130	...	87	
Other kinds	...	...	...	6	183				
Total to end of June 1892 ...	8	239	217	56	565	130	...	87	
From July 1892 to June 1893.									
Teak logs...	50	382	130	151	7,350	7,264	7,134	...	
Other kinds	6	183		9	172	14	14	...	
Total ..	56	565	130	160	7,522	7,278	7,148	...	
From April 1892 to June 1893.									
Teak	8	239	217	151	7,350	7,264	7,047	...	
Other woods	...	...	...	9	172	14	14	...	
Total Western Circle ...	8	239	217	160	7,522	7,278	7,061	...	
GRAND TOTAL UPPER BURMA ...	2,401	33,752	11,214	3,474	56,685	27,968	16,754	...	

FORM NO. 60-A [PRESCRIBED].—*Abstract showing the Value of Live and Dead Stock in the Eastern and Western Circles from 1st April 1892 to 30th June 1893.*

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	No.	Cubic feet.	Value.	No.	Cubic feet.	Value.	In favour of the year.	Against the year.	
1	2	3	4	5	6	7	8	9	10
EASTERN CIRCLE.			Rs.			Rs.	Rs.	Rs.	
Elephants	27	...	30,982	25	...	28,962	...	2,020	Does not include two calves.
Bullocks	...	...	...	2	...	160	160	...	
Buildings (a)	17	...	33,145	22	...	46,250	13,105	...	(a) Number shows only buildings costing over Rs. 200, but the cost of all buildings is included in the value.
Dead-stock	...	...	31,059	...	...	34,680	3,621	...	The value of buildings and dead-stock is arrived at by adding value of buildings and dead-stock acquired during the year to the value of the same in the beginning of the year less 5 per cent. of the latter on account of deterioration.
Total Eastern Circle ...	...	...	95,186	...	...	1,10,052	14,866	...	
WESTERN CIRCLE.									
Live-stock	16	...	19,490	19	...	22,426	2,936	...	(b) Rupees 3,000 deducted on account of Kindat house destroyed by fire.
Buildings (c)	6	...	24,260	11	...	28,312 (b)	4,052	...	(c) Number shows only buildings costing over Rs. 200, but the cost of all buildings is included in the value.
Dead-stock	...	...	7,880	...	...	19,936	12,056	...	The value of buildings and dead-stock is arrived at by adding value of buildings and dead-stock acquired during the year to the value of the same at the beginning of the year less 5 per cent. of the latter on account of depreciation.
Total Western Circle ...	...	...	51,630	...	...	70,674	19,044	...	
GRAND TOTAL UPPER BURMA ...	...	...	1,46,816	...	...	1,80,726	33,910	...	

FORM NO. 61.—*Summary of Revenue of the different Divisions in the Eastern and Western Circles for the year 1892-93.*

Budget heads.	Direction.	Bhamo division	Katha division.	Mandalay division.	Mu division.	Pyinmana division	Total Eastern Circle.	Direction.	Upper Chindwin division.	Lower Chindwin division.	Minbu division.	Yaw division.	Total Western Circle.	GRAND TOTAL.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RECEIPTS.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
I.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY—														
(a) Timber	.....	2,553 8 1	3,693 11 6	.....	275 0 6	.....	6,522 4 1	.....	...	.....	4,701 11 5	.....	4,701 11 5	11,223 15 6
(b) Firewood and charcoal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(c) Bamboos	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(d) Sandal-wood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(e) Grass and other minor produce	.....	.....	.....	.....	.....	.....	.....	.....	.....	832 8 0	.....	.....	832 8 0	832 8 0
II.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY CONSUMERS OR PURCHASERS—														
(a) Timber	28,500 0 0	1,58,201 12 6	2,71,155 2 4	72,400 13 6	1,47,807 6 11	6,44,587 15 0	13,16,653 2 3	.....	5,517 7 3	13,495 1 0	20,579 15 7	3,45,063 7 9	3,84,655 15 7	17,01,309 1 10
(b) Firewood and charcoal	.....	1,222 15 8	2,609 3 2	13,391 13 1	2,694 12 2	3,751 0 0	23,669 12 1	.....	404 9 0	1,349 15 4	1,882 14 3	1,300 14 6	4,938 5 1	28,608 1 2
(c) Bamboos	.....	1,294 1 0	13,434 14 7	4,609 4 2	4,303 3 5	649 5 3	24,290 12 5	.....	2,419 12 3	7,468 6 3	2,499 7 0	.....	12,387 9 6	36,678 5 11
(d) Grazing and fodder grass	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(e) Other minor produce	.....	1,18,237 1 3	3,680 15 9	556 2 0	6,504 12 0	4,608 3 0	1,33,587 2 0	.....	541 12 9	37,742 1 0	35,713 8 0	20,125 2 0	94,122 7 9	2,27,709 9 9
III.—DRIFT AND WAIF WOOD AND CONFISCATED FOREST PRODUCE	.....	581 4 0	6,918 4 2	949 7 5	18,738 5 1	363 0 0	27,550 4 8	.....	.....	3,194 8 6	2,838 11 2	1,746 11 6	7,779 15 2	35,330 3 10
IV.—REVENUE FROM FORESTS NOT MANAGED BY GOVERNMENT—														
(a) Duty on foreign timber and other forest produce	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(b) Revenue from shared and private forests	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
V.—MISCELLANEOUS—														
(a) Fines and forfeitures	.....	50 0 0	.....	620 7 6	.....	.....	670 7 6	.....	.....	.....	.....	50 0 0	50 0 0	720 7 6
(b) Refunds	3 0 0	115 2 10	55 11 0	16 2 8	0 3 1	0 10 0	190 13 7	204 3 6	.....	272 0 0	4 2 0	76 0 0	556 5 6	747 3 1
(c) Other sources	6,813 0 4	2,577 13 0	4,141 13 0	2,415 3 1	1,635 5 3	4,815 5 9	22,398 8 5	304 0 0	973 0 0	5,167 6 9	1,707 2 8	2,919 5 11	11,070 14 8	33,469 7 1
Total	35,316 0 4	2,78,833 10 4	3,05,689 11 6	94,959 5 5	1,81,959 0 5	6,58,775 7 0	15,55,533 3 0	508 3 6	9,856 9 3	69,521 14 10	69,927 7 5	3,71,281 9 8	5,21,095 12 8	20,76,628 15 8

CALCUTTA:
The 17th June 1893.

J. C. BOSE,
Assistant Comptroller-General (Forests).

FORM NO. 61.—*Summary of Expenditure of the different Divisions in the Eastern and Western Circles for the year 1892-93.*

Budget heads	Direction.	Bhamo division.	Katha division.	Mandalay division.	Mu division.	Pyinmana division.	Total Eastern Circle.	Direction.	Upper Chindwin division.	Lower Chindwin division.	Minbu division.	Yaw division	Total Western Circle	Grand total.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
A.—CONSERVANCY AND WORKS.														
I.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY—														
(a) Timber	.....	3,714 8 3	1,502 6 10	.....	.....	.....	5,216 15 1	11 9 0	.....	.....	429 0 0	.....	440 9 0	5,657 8 1
(b) Firewood and charcoal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(c) Bamboos	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(d) Sandal-wood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(e) Grass and other minor produce	.....	.....	.....	.....	.....	.....	.....	.....	.....	832 8 0	.....	.....	832 8 0	832 8 0
II.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY CONSUMERS OR PURCHASERS	.....	191 13 9	218 1 6	458 8 10	615 6 0	1,913 3 3	3,397 1 4	.....	1878 14 8	1,139 8 0	...	252 15 5	3,271 6 1	6,668 7 5
III.—DRIFT AND WAIF WOOD AND CONFISCATED FOREST PRODUCE	351 7 6	2,513 2 8	3,998 13 7	4,130 11 10	1,079 5 0	53 12 0	12,127 4 7	737 1 0	40 8 0	1,013 8 1	2,505 1 1	612 9 11	4,908 12 1	17,036 0 8
IV.—REVENUE FROM FOREST NOT MANAGED BY GOVERNMENT—														
(a) Duty on foreign timber and other forest produce	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(b) Revenue from shared and private forests	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
V.—RENT OF LEASED FORESTS AND PAYMENTS TO SHAREHOLDERS IN FORESTS MANAGED BY GOVERNMENT	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
VI.—LIVE-STOCK, STORES, TOOLS AND PLANT—														
(a) Purchase of cattle	7,725 0 0	.....	...	160 0 0	.....	.....	7,885 0 0	6,161 0 0	.....	.....	1,500 0 0	.....	7,661 0 0	15,546 0 0
(b) Feed and keep of cattle	2,364 8 2	1,848 4 8	1,892 11 0	881 7 0	919 7 4	1,258 11 6	9,165 1 8	381 3 6	682 6 0	2,282 4 10	1,319 8 10	759 7 9	5,424 14 11	14,590 0 7
(c) Purchase of stores and tools and plant	2,691 0 4	363 8 0	470 1 0	365 11 8	119 0 0	247 12 0	4,257 1 0	10,780 3 2	343 0 0	203 5 0	542 12 0	197 0 0	12,066 4 2	16,323 5 2
VII.—COMMUNICATIONS AND BUILDINGS—														
(a) Roads and bridges	.....	...	55 0 0	3 0 0	.....	.....	58 0 0	.....	...	4 8 0	28 10 0	99 10 0	132 12 0	190 12 0
(b) Buildings	.....	1,822 1 6	2,844 5 0	933 15 8	328 9 3	4,089 9 6	10,018 8 11	.....	2,112 12 0	3,214 9 9	937 10 8	1,280 12 0	7,545 12 5	17,564 5 4
(c) Other works	.....	160 12 6	1,043 4 7	219 6 0	11 10 0	110 8 0	1,545 8 7	.....	173 0 0	38 12 8	305 1 3	4 0 0	520 13 11	2,066 6 6
VIII.—DEMARCATION, IMPROVEMENT, AND EXTENSION OF FORESTS—														
(a) Demarcation	5,662 3 7	.....	2,309 12 10	.....	.....	1,016 0 0	8,988 0 5	.....	.....	.....	1,390 13 2	580 7 0	1,971 4 2	10,959 4 7
(b) Compensation for land and rights	.....	18 0 0	.....	.....	.....	.....	18 0 0	.....	.....	.....	146 0 0	907 12 0	1,053 12 0	1,071 12 0
(c) Surveys and working plans	386 14 8	601 6 6	658 13 4	298 4 0	584 0 0	10,141 12 3	12,671 2 9	107 2 0	152 8 0	1,472 8 0	275 14 0	532 11 0	2,540 11 0	15,211 13 9
(d) Working plans	78 14 8	...	121 11 5	56 8 0	.....	.....	257 5 1	.....	132 0 0	.....	.....	.....	132 0 0	389 5 1
(e) Sowing and planting	10 5 0	5 0 0	2,360 2 0	951 4 0	.....	456 15 0	3,783 10 0	.....	.....	.....	196 12 0	.....	196 12 0	3,980 6 0
(f) Protection from fire	.....	...	41 12 0	104 8 0	...	590 0 6	736 4 6	.....	.....	.....	.....	.....	.....	736 4 6
(g) Other works	.....	103 0 0	22 0 0	.....	9 6 0	54 0 0	188 6 0	.....	64 0 0	29 8 0	...	.....	93 8 0	281 14 0
IX.—MISCELLANEOUS—														
(a) Refunds	...	100 0 0	115 0 0	.....	.....	.....	215 0 0	.....	115 11 7	3 0 0	206 8 10	278 9 9	603 14 2	818 14 2
(b) Law charges	10 10 8	.....	.....	2 6 0	.....	25 0 0	38 0 8	.....	0 8 0	.....	10 8 0	.....	11 0 0	49 0 8
(c) Other charges	815 3 11	24 2 0	132 0 0	169 6 0	10 15 0	17 4 0	1,168 14 11	142 14 9	115 8 6	209 4 0	32 11 6	163 5 0	663 11 9	1,832 10 8
Total A.—Conservancy and Works	20,096 4 6	11,465 11 4	17,786 2 1	8,735 1 0	3,677 10 7	19,974 8 0	81,735 5 6	18,321 1 5	5,810 12 9	10,443 4 4	9,826 15 4	5,669 3 10	50,071 5 8	1,31,806 11 2
B.—ESTABLISHMENT.														
I.—SALARIES—														
(a) Conservators	16,238 6 2	...	...	...	...	...	16,238 6 2	13,852 2 2	...	.....	.....	...	13,852 2 2	30,090 8 4
(b) Superior officers	10,476 14 9	13,813 12 3	17,073 6 6	11,878 15 9	8,662 6 8	13,457 11 0	75,363 2 11	598 9 0	4,800 0 0	15,000 8 7	13,881 14 3	6,600 0 0	40,880 15 10	116,244 2 9
(c) Subordinate forest and depôt establishments	1,024 0 0	3,396 10 8	6,875 8 11	7,256 1 4	3,093 6 7	9,657 7 9	31,303 3 3	.....	1,082 2 1	6,819 4 2	5,150 1 4	3,970 9 9	17,022 1 4	48,325 4 7
(d) Office establishments	9,803 14 1	2,495 14 11	3,878 4 11	5,234 7 9	1,851 10 3	3,069 1 4	26,033 5 3	4,350 12 11	1,116 6 9	3,199 8 11	2,745 14 3	1,565 2 9	12,977 12 10	39,011 2 1
(e) Deputation and special allowances	1,797 4 3	2,932 0 0	4,151 3 6	2,540 0 0	1,200 0 0	2,720 0 0	15,340 7 9	700 0 0	1,480 0 0	3,849 9 6	2,500 0 0	1,200 0 0	9,729 9 6	25,070 1 3
II.—TRAVELLING ALLOWANCES—														
(a) Conservators	2,308 7 8	.....	.....	...	.....	.....	2,308 7 8	1,133 11 7	...	.....	.....	.....	1,133 11 7	3,442 3 3
(b) Superior officers	2,514 12 0	3,122 5 2	3,990 13 8	4,251 10 7	1,322 8 0	3,810 12 8	19,012 14 1	168 8 0	1,379 3 4	3,536 3 10	2,806 4 6	1,721 1 6	9,611 5 2	28,624 3 3
(c) Subordinate forest and depôt establishments	482 14 8	818 2 0	852 0 11	708 14 10	195 8 0	964 7 0	4,017 15 5	.....	226 3 0	867 4 6	429 14 3	286 2 0	1,809 7 3	5,827 6 8
(d) Office establishments	1,220 6 9	152 9 6	520 10 6	419 13 0	146 6 0	702 9 5	3,162 7 2	250 12 9	102 0 0	515 12 0	555 3 1	389 0 0	1,812 11 10	4,975 3 0
III.—CONTINGENCIES—														
(a) Stationery	57 14 9	.....	4 12 0	1 0 0	3 12 0	12 12 6	80 3 3	32 1 0	.....	14 4 0	14 2 6	2 1 0	62 8 6	142 11 9
(b) Carriage of tents and records	152 12 0	22 10 0	393 3 0	295 4 0	.....	131 12 0	995 9 0	15 0 0	56 8 0	354 4 0	222 4 0	91 10 0	739 10 0	1,735 3 0
(c) Rents, rates, and taxes	.....	162 2 8	.....	165 11 0	...	41 0 0	368 13 8	.....	.....	4 6 2	65 7 0	.....	69 13 2	438 10 10
(d) Pay of police guards	.....	.....	...	.....	.....	.....	...	...	...	...	...	...	...	.....
(e) Official postage	337 9 6	60 7 6	126 2 6	161 15 0	84 8 0	106 13 0	877 7 6	307 2 0	20 1 0	116 6 0	145 11 0	93 15 0	683 3 0	1,560 10 6
(f) Sundries	1,321 10 5	348 13 9	352 7 0	818 1 5	87 14 0	102 1 6	3,030 15 7	621 2 3	53 13 0	359 0 6	243 3 6	145 6 0	1,422 9 3	4,453 8 10
Total B.—Establishments	47,736 15 0	27,325 8 5	38,218 9 5	33,727 14 8	16,347 15 6	34,776 7 8	1,98,133 6 8	22,030 13 8	10,316 5 2	34,636 7 8	28,759 15 8	16,064 15 3	1,11,809 9 5	3,09,941 0 1
GRAND TOTAL OF EXPENDITURE	67,833 3 6	38,791 3 9	56,004 11 6	42,462 15 8	20,025 10 1	54,750 15 8	2,79,868 12 2	40,350 15 1	16,127 1 11	45,079 12 0	38,586 15 0	21,734 3 1	1,61,878 15 1	4,41,747 11 3

J. C. BOSE,
Assistant Comptroller-General (Forests).

FORM NO. 61.—*Consolidated Summary of Revenue of the different Divisions in the Eastern and Western Circles from 1st April 1892 to 30th June 1893.*

Budget heads.	Direction.	Bhamo division.	Katha division.	Mandalay division.	Mu division.	Pyinmana division.	Total Eastern circle.	Direction.	Upper Chindwin division.	Lower Chindwin division.	Minbu division.	Yaw division.	Total Western circle.	GRAND TOTAL.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RECEIPTS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY—														
(a) Timber	...	10,254	3,694	...	275	...	14,223	...	...	...	4,702	...	4,702	18,925
(b) Firewood and charcoal	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(c) Bamboos	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(d) Sandal-wood	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(e) Grass and other minor produce	...	...	...	...	...	...	...	...	...	832	...	...	832	832
Total	...	10,254	3,694	...	275	...	14,223	...	...	832	4,702	...	5,534	19,757
II.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY CONSUMERS OR PURCHASERS—														
(a) Timber	28,500	1,61,760	2,87,150	75,448	1,50,871	6,54,008	12,57,737	...	6,919	16,901	21,656	3,45,607	3,91,083	17,48,820
(b) Firewood and charcoal	...	1,241	3,207	16,276	3,699	3,764	28,187	...	725	2,300	2,699	1,709	7,433	35,620
(c) Bamboos	...	1,559	16,467	6,371	5,846	859	31,102	...	4,569	11,073	4,456	3	20,101	51,203
(d) Grazing and fodder grass	...	...	...	...	...	...	...	...	...	...	...	..	...	..
(e) Other minor produce	...	2,21,036	4,419	668	6,872	4,966	237,961	...	8,129	40,109	35,746	20,568	1,04,552	3,42,513
Total	28,500	3,85,596	3,11,243	98,763	1,67,288	6,63,597	16,54,987	.	20,342	70,383	64,557	3,67,887	5,23,169	21,78,156
III.—DRIFT AND WAIF WOOD AND CONFISCATED FOREST PRODUCE	...	1,346	7,635	1,174	18,961	453	29,565	....	...	3,195	2,856	1,765	7,816	37,385
IV.—REVENUE FROM FORESTS NOT MANAGED BY GOVERNMENT—														
(a) Duty on foreign timber and other forest produce	...	...	...	...	...	...	...	...	...	...	.	...	...	...
(b) Revenue from shared and private forests	...	...	...	...	...	...	..	...	...	...		...	...	...
Total	...	...	...	...	...	..	...	...	...	...	...	...	...	...
V.—MISCELLANEOUS—														
(a) Fines and forfeitures	...	50	...	875	...	...	925		...	...	...	50	50	975
(b) Refunds	111	142	109	18	...	55	435	204	106	290	23	91	714	1,149
(c) Other sources	6,936	3,418	5,046	3,340	1,949	6,287	26,976	374	2,401	5,769	1,983	3,505	14,032	41,008
Total	7,047	3,610	5,155	4,233	1,949	6,342	28,336	578	2,507	6,059	2,006	3,646	14,796	43,132
Total Receipts	35,547	4,00,806	3,27,727	1,04,170	1,88,473	6,70,392	19,27,115	578	22,849	80,469	74,121	3,73,298	5,51,315	22,78,430

CALCUTTA:
The 15th September 1893.

J. C. BOSE,
Assistant Comptroller-General (Forests).

FORM NO. 61.—*Consolidated Summary of Expenditure of the different Divisions in the Eastern and Western Circles from 1st April 1892 to 30th June 1893.*

Budget heads.	Direct	Bhamo division.	Katha division	Mandalay division.	Mu division.	Pyinmana division.	Total Eastern circle.	Direction.	Upper Chindwin division	Lower Chindwin division.	Minbu division.	Yaw division.	Total Western circle.	GRAND TOTAL
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A.—CONSERVANCY AND WORKS.	Rs.	Rs	Rs	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY—														
(a) Timber	...	3,784	1,510	...			5,294	12	...	...	429	..	441	5,735
(b) Firewood and charcoal	...	...	...	...	...	...	...	...	..	..	...	...	...	...
(c) Bamboos	...	..	...	...	...	.	..	...	...	...	..	...	.	.
(d) Sandal-wood	...	..	...	...	..	..	..	...	...	...	...	...	...	...
(e) Grass and other minor produce	...		...	...	...	.	..	...	...	832	.	.	832	832
Total		3,784	1,510	...	.	..	5,294	12	...	832	429	..	1,273	6,567
II.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY CONSUMERS OR PURCHASERS	...	212	335	459	794	2,643	4,443	..	2,043	1,337		253	3,633	8,076
III.—DRIFT AND WAIF WOOD AND CONFISCATED FOREST PRODUCE	547	3,039	4,735	5,399	1,523	54	15,297	1,399	40	1,022	2,975	808	6,244	21,541
IV.—REVENUE FROM FORESTS NOT MANAGED BY GOVERNMENT—														
(a) Duty on foreign timber and other forest produce	...	...	...	...	.	..		...	..	.	.	...	.	
(b) Revenue from shared and private forests	.	...	...		...	...	...			...	..	..	.	...
Total	.				..	..	..			..	.	. .	...	..
V.—RENT OF LEASED FORESTS AND PAYMENTS TO SHAREHOLDERS IN FORESTS MANAGED BY GOVERNMENT.														
VI.—LIVE-STOCK, STORES, TOOLS AND PLANT—														
(a) Purchase of cattle	7,725	...	...	160			7,885	6,161	...	...	1,500	..	7,661	15,546
(b) Feed and keep of cattle	2,855	2,084	2,314	1,055	1,331	1,619	11,258	393	913	2,934	1,520	1,020	6,780	18,038
(c) Purchase of stores and tools and plant	3,368	478	480	474	124	256	5,180	11,141	365	203	545	197	12,451	17,631
Total	13,948	2,562	2,794	1,689	1,455	1,875	24,323	17,695	1,278	3,137	3,565	1,217	26,892	51,215
VII.—COMMUNICATIONS AND BUILDINGS—														
(a) Roads and bridges			70	3	..	...	73	.		5	28	103	136	209
(b) Buildings	...	2,170	3,012	5,106	344	4,128	14,860	16	2,231	3,214	1,371	1,384	8,216	23,076
(c) Other works	...	161	1,052	219	11	114	1,557	.	313	141	305	4	763	2,320
Total	...	2,331	4,134	5,328	355	4,342	16,490	16	2,544	3,360	1,704	1,491	9,115	25,605
VIII.—DEMARCATION, IMPROVEMENT, AND EXTENSION OF FORESTS—														
(a) Demarcation	5,662		2,958		624	1,099	10,343		.	..	2,235	580	2,815	13,158
(b) Compensation for land and rights	...	18	...		..		18	...	...	531	146	1,834	2,511	2,529
(c) Surveys	387	601	659	298	584	16,011	18,540	107	152	1,473	413	533	2,678	21,218
(d) Working plans	206	91	586	81	...		964	...	133	265	245	174	817	1,781
(e) Sowing and planting	31	82	2,957	1,756	...	1,154	5,310	...		...	197		197	5,507
(f) Protection from fire	...	.	42	105	..	906	1,053	...	...	...		..	..	1,053
(g) Other works	...	238	22	...	10	55	525	.	64	29	...	..9	93	618
Total	6,266	970	7,224	1,640	1,218	19,135	36,753	107	349	2,298	3,236	3,121	9,111	45,864
IX.—MISCELLANEOUS—														
(a) Refunds	.	100	115	..		.	215	29	116	13	207	278	643	858
(b) Law charges	11	..	..	2		25	38	..	.	..	11	..	11	49
(c) Other charges	836	50	132	177	67	28	1,290	163	116	209	68	169	725	2,015
Total	847	150	247	179	67	53	1,543	192	232	222	286	447	1,379	2922
TOTAL A.—CONSERVANCY AND WORKS	21,608	11,048	20,979	14,694	5,412	28,402	1,04,143	19,421	6,486	12,208	12,195	7,337	57,647	1,61,790

FORM NO. 61.—*Consolidated Summary of Expenditure of the different Divisions in the Eastern and Western Circles from 1st April 1892 to 30th June 1893* —concluded.

Budget heads.	Direction.	Bhamo division.	Katha division.	Manulay division.	Mu division.	Pyinmana division.	Total Eastern circle.	Direction.	Upper Chindwin division.	Lower Chindwin division.	Minbu division.	Yaw division.	Total Western circle.	GRAND TOTAL.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.
Brought forward Total A—Conservancy and Works ...	21,608	13,048	20,979	14,694	5,412	28,402	1,04,143	19,421	6,486	12,208	12,195	7,337	57,647	1,61,790
B.—ESTABLISHMENT.														
I.—SALARIES—														
(a) Conservators	20,288	...	...	...	...	..	20,288	18,652	...	..	.	.	18,652	38,940
(b) Superior officers	12,327	15,764	20,787	14,529	10,612	16,458	90,477	1,049	7,300	19,931	17,437	8,480	54,197	1,44,674
(c) Subordinate forest and depôt establishments	1,228	4,552	8,798	9,134	4,495	12,326	40,533	...	1,631	8,018	6,646	5,249	21,544	62,077
(d) Office establishment	12,397	3,170	4,867	6,524	2,035	3,744	32,637	5,860	1,627	3,942	3,483	1,950	16,862	49,499
(e) Deputation and special allowances	2,295	3,472	5,186	3,200	1,500	3,320	18,973	800	2,220	4,610.	3,100	1,580	12,310	31,283
Total ...	48,435	26,958	39,638	33,387	18,642	35,848	2,02,908	26,361	12,778	36,501	30,666	17,259	1,23,565	3,26,473
II.—TRAVELLING ALLOWANCES—														
(a) Conservators	2,962	...	...	...	...	...	2,962	1,133	...	..	...	.	1,133	4,095
(b) Superior officers	3,112	3,976	5,971	5,164	2,201	4,561	24,985	655	2,761	4,357	3,936	2,543	14,252	39,237
(c) Subordinate forest and depôt establishments	552	1,029	1,054	946	402	1,200	5,183	...	358	1,057	628	375	2,418	7,601
(d) Office establishments	1,850	256	726	499	298	837	4,426	251	375	640	649	430	— 2,345	6,771
Total ...	8,476	5,261	7,751	6,609	2,861	6,598	37,556	2,039	3,494	6,054	5,213	3,348	20,148	57,704
III.—CONTINGENCIES—														
(a) Stationery	96	...	6	2	4	16	124	38	5	15	15	2	75	199
(b) Carriage of tents and records	202	26	826	323	3	174	1,554	30	123	564	257	165	1,139	2,693
(c) Rents, rates, and taxes	...	162	...	228	...	45	435	...	...	4	66	.	70	505
(d) Pay of police guards	..	...	...	..	...	...	...	...	...	...	...	..	...	...
(e) Official postage	373	85	160	197	107	141	1,063	314	30	143	186	127	860	1,923
(f) Sundries	1,556	406	454	889	181	110	3,596	932	117	428	274	179	1,930	5,526
Total ...	2,227	679	1,446	1,639	295	486	6,772	1,374	275	1,154	798	473	4,074	10,846
Total B.—Establishment ...	59,138	32,898	48,835	41,635	21,798	42,932	2,47,236	29,774	16,547	43,709	36,677	21,080	1,47,787	3,95,023
GRAND TOTAL OF EXPENDITURE ...	80,746	45,946	69,814	56,329	27,210	71,334	3,51,379	49,195	23,033	55,917	48,872	28,417	2,05,434	5,56,813
Surplus or deficit ...	— 45,199	+3,54,860	+2,57,913	+ 47,841	+1,61,263	+5,99,058	+13,75,736	— 48,617	— 184	+ 24,552	+ 26,249	+ 3,44,881	+ 3,45,881	+17,21,617

CALCUTTA:
The 15th September 1893.

J. C. BOSE,
Assistant Comptroller-General (Forests).

Dr. FORM NO 62.—*Statement showing Account-Current in the Eastern Circle for the year 1892-93.* *Cr.*

1		2	3	4		5	6
EASTERN CIRCLE.		Rs A. P	Rs A. P	EASTERN CIRCLE.		Rs. A. P	Rs A. P.
To Cash balances			1,549 8 7	By Expenditure as per Annual Summary Form No. 61			2,79,868 12 2
To VIII—Assessed Taxes—				„ Deposits			50 0 0
Income-tax deductions from salaries			3,297 15 1				
Revenue as per Annual Summary Form No. 61			15,55,533 3 0	*By Forest Cash Remittances (Local)—*			
To Service Funds—				Remittances to treasuries		15,10,159 8 5	
Civil Fund, Ordinary, Bengal				Inter-divisional transfers		8,392 3 5	
Civil Fund, Additional, Bengal							15,18,551 11 10
Military Fund, Bengal				By Advances recoverable			1,33,434 15 11
Military Fund, Madras				„ Suspense			773 12 0
Military Orphan Fund, Bengal							
Uncovenanted Service Family Pension Fund, Bengal		1,025 1 0		*By Account-current (other Governments)—*			
General Family Pension Fund				Remittances to the Government of India			5,417 0 0
Hindu Family Annuity Fund							
			1,025 1 0	*By Inter Departmental Transfers—*			
To Deposits			50 0 0	Public Works Department, State Railways	31,828 11 7		
To Forests Cash Remittances (Local)—				Public Works Department, Ordinary Branches	5,081 7 6		
Forest cheques drawn		2,57,068 1 10				36,910 3 1	
Inter-divisional transfers		9,168 14 9		Military Department, Bengal		0 5 6	
			2,66,237 0 7				
To Advances recoverable			1,27,661 13 4	*By Civil Department—*			
„ Suspense			1,213 5 0	Jails	1,791 8 1		
To Account-current (other Governments)—				Police	6,852 7 0		
Remittances from Government of India		13,954 0 11		Miscellaneous	626 10 7		
Remittances from Government of Bengal		52 11 5				9,270 9 8	
			14,006 12 4	Telegraph Department		17 0 0	
To Inter-Departmental Transfers—				Marine Department		715 0 4	46,053 2
Public Works Department, State Railways	880 0 0						
Public Works Department, Ordinary Branches	17 9 6						
		897 9 6					
Military Department, Bengal		1,595 9 8		By Cash balances			126 15 4
To Civil Department—							
Jails	47 12 6						
Police	5,200 0 0						
Mathematical Instrument Department	96 0 0						
Miscellaneous	6,055 7 3						
		11,399 3 9					
Marine Department		799 4 0	14,601 10 11				
Total			19,85,176 5 10	Total			19,85,176 5 10

CALCUTTA:
The 17th June 1893.

J. C BOSE,
Assistant Comptroller-General (Forests).

FORM NO 62.—*Statement showing Revised Account-Current of the Western Circle for the year 1892-93.*

1	2	3	4	5	6
WESTERN CIRCLE	Rs A. P.	Rs A. P.	WESTERN CIRCLE.	Rs. A P.	Rs. A. P.
To Cash balances	.....	32 7 6	By Expenditure as per Annual Summary Form No 61	...	1,61,878 15 1
To VIII.—Assessed Taxes—			„ Deposits	...	
Income-tax deductions from salaries	..	1,874 9 2	*By Forest Cash Remittances (Local)—*		
Revenue as per Annual Summary, Form No 61	...	5,21,095 12 8	Remittances to treasuries	5,17,235 8 0	
To Service Funds—			Inter-divisional transfers	4,892 7 2	
Civil Fund, Ordinary, Bengal	.....				5,22,127 15 2
Civil Fund, Additional, Bengal	.....		By Advances recoverable	.....	69,814 15 5
Military Fund, Bengal	.....		„ Suspense	.....	219 4 0
Military Fund, Madras	...				
Military Orphan Fund, Bengal	...		*By Account-current (other Governments)—*		
Uncovenanted Service Family Pension Fund, Bengal	1,276 15 0				
General Family Pension Fund	143 12 0		Remittances to the Government of Punjab	5 2 0	
Hindu Family Annuity Fund	.....	1,42,020 11 0	Remittances to the Government of Bombay	69 0 0	74 2 0
To Deposits			*By Inter-Departmental Transfers—*		
To Forest Cash Remittances (Local)—			Public Works Department, Ordinary Branches	1,392 1 3	
Forest cheques drawn	1,44,971 4 9		Military Department	...	
Inter-divisional transfers	6,926 11 10	1,51,898 0 7	*By Civil Department—*		
To Advances recoverable	.. ..			Rs A .P.	
„ Suspense	...	71,263 3 1	Jails	892 8 0	
		122 1 5	Police	385 8 0	
To Account-current (other Governments)—			Survey of India Department	9 0 0 ..	
Remittances from Government of Central Provinces	340 0 0		Miscellaneous	253 8 0 1,540 8 0	
Remittances from Government of Punjab	5 2 0		Telegraph Department	25 0 0	
Remittances from Government of Bombay	69 0 0	414 2 0	Marine Department	9,988 14 8	12,946 7 11
To Inter-Departmental Transfers—			By Cash balances	.....	795 4 10
Public Works Department	...		Total,	....	7,67,857 0 5
Military Department, Bengal	792 3 4				
Civil Department— Rs. A. P					
Jail 22 5 0	.....				
Police 37 8 0	.....				
Mathematical Instrument Department ... 756 6 0					
Survey of India Department 239 12 0	...				
Miscellaneous 7,874 0 0	..				
	8,929 15 0				
Telegradh Department	25 0 0				
Marine Department	9,988 14 8	19,736 1 0			
Total ...	..	7,67,857 0 5			

CALCUTTA:
The 8th August 1893.

J. C. BOSE,
Assistant Comptroller-General (Forests).

FORM 62A.—*Statement showing Account Current of the Eastern and Western Circles for the year 1892-93.*

1	Eastern circle. 2	Western circle. 3	Total. 4	5	Esstern circle. 6	Western circle. 7	Total. 8
	Rs. A. P.	Rs. A. P.	Rs. A. P.		Rs. A. P.	Rs. A. P.	Rs. A. P.
To Cash balances	1,549 8 7	32 7 6	1,582 0 1	By Expenditure as per Annual Summary Form No. 61	2,79,868 12 2	1,61,878 15 1	4,41,747 11 3
To VIII.—Assessed Taxes—				By Deposits	50 0 0	...	50 0 0
Income-tax deductions from salaries	3,297 15 1	1,874 9 2	5,172 8 3	*By Forest Cash Remittances (Local)—*			
Revenue as per Annual Summary, Form No. 61	15,55,533 3 0	5,21,095 12 8	20,76,628 15 8	Remittances to treasuries	15,10,159 8 5	5,17,235 8 0	20,27,395 0 5
To Service Funds—				Inter-divisional transfers	8,392 3 5	4,892 7 2	13,284 10 7
Civil Fund, Ordinary, Bengal	...	...	...	By Advances recoverable	1,33,434 15 11	69,814 15 5	2,03,249 15 4
Civil Fund, Additional, Bengal	...	...	...	„ Suspense	773 12 0	219 4 0	993 0 0
Military Fund, Bengal	...	...	..	*By Account-current (other Government)—*			
Military Fund, Madras	...	...	..	Remittances to the Government of India	5,417 0 0	...	5,417 0 0
Military Orphan Fund, Bengal	..	...	..	Remittances to the Government of Central Provinces	...		...
Uncovenanted Service Family Pension Fund, Bengal	1,025 1 0	1,276 15 0	2,302 0 0	Remittances to the Government of Punjab	...	5 2 0	5 2 0
General Family Pension Fund	...	143 12 0	143 12 0	Remittances to the Government of Bombay	...	69 0 0	69 0 0
Hindu Family Annuity Fund	..	..	...	*By Inter-Departmental Transfers—*			
To Deposits	50 0 0	...	50 0 0	Public Works Department, State Railways	31,828 11 7	...	31,828 11 7
To Forest Cash Remittances (Local)—				Public Works, Department, Ordinary Branches	5,081 7 6	1,392 1 3	6,473 8 9
Forest cheques drawn	2,57,068 1 10	1,44,971 4 9	4,02,039 6 7	Military Department, Bengal	0 5 6		0 5 6
Inter-divisional transfers	9,168 14 9	6,926 11 10	16,095 10 7	*By Civil Departments—*			
To Advances recoverable	1,27,661 13 4	71,263 3 1	1,98,925 0 5	Jail	1,791 8 1	892 8 0	2,684 0 1
„ Suspense	1,213 5 0	122 1 5	1,335 6 5	Police	6,852 7 0	385 8 0	7,237 15 0
To Account-current (other Departments)—				Survey of India Department		9 0 0	9 0 0
Remittances from Government of India	13,954 0 11		13,954 0 11	Miscellaneous	626 10 7	253 8 0	880 2 7
Remittances from Government of Bengal	52 11 5		52 11 5	Telegraph Department	17 0 0	25 0 0	42 0 0
Remittances from Government of Central Provinces		340 0 0	340 0 0	Marine Department	755 0 4	9,988 14 8	10,743 15 0
Remittances from Government of Punjab	...	5 2 0	5 2 0	By Cash balances	126 15 4	795 4 10	922 4 2
Remittances from Government of Bombay	...	69 0 0	69 0 0				
Public Works Department, State Railways	880 0 0		880 0 0				
Public Works Department, Ordinary Branches	17 9 6	..	17 9 6				
To Military Department, Bengal	1,505 9 8	792 3 4	2,297 13 0				
To Civil Department—							
Jail	47 12 6	22 5 0	70 1 6				
Police	5,200 0 0	37 8 0	5,237 8 0				
Mathematical Instrument Department	96 0 0	756 6 0	852 6 0				
Survey of India Department	...	239 12 0	239 12 0				
Miscellaneous	6,055 7 3	7,874 0 0	13,929 7 3				
Telegraph Department		25 0 0	25 0 0				
Marine Department	799 4 0	9,988 14 8	10,788 2 8				
Total	19,85,176 5 10	7,67,857 0 5	27,53,033 6 3	Total	19,85,176 5 10	7,67,857 0 5	27,53,033 6 3

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Dr. FORM NO. 62 [PRESCRIBED].—*Statement showing Account-Current in the Eastern Circle from 1st April 1892 to 30th June 1893.* *Cr.*

1		2	3	4		5	6
EASTERN CIRCLE.		Rs. A. P.	Rs. A. P.	EASTERN CIRCLE.		Rs. A. P.	Rs. A. P.
To Cash balances		.....	1,549 8 7	By Expenditure as per Annual Summary Form No. 61		.....	3,51,378 15 2
				Deposits		.....	100 0 0
To VIII.—Assessed Taxes—							
Income-tax deductions from salaries		.....	3,978 10 9	*By Forest Cash Remittances (Local)—*			
Revenue as per Annual Summary Form No. 61		.....	17,27,114 15 6				
To Service Funds—				Remittances to treasuries		16,77,508 15 10	
				Inter-divisional transfers		8,495 3 5	
Civil Fund, Ordinary, Bengal		.....					16,86,004 3 3
Civil Fund, Additional, Bengal		.....		By Advances recoverable		.....	1,99,837 14 11
Military Fund, Bengal		.....		„ Suspense		.....	925 12 0
Military Fund, Madras		.....					
Military Orphan Fund, Bengal		.....		*By Account-current (other Governments)—*			
Uncovenanted Service Family Pension Fund, Bengal		1,107 12 0					
General Family Pension Fund		.....		Remittances to the Government of India		13,701 4 0	
Hindu Family Annuity Fund		.....					13,701 4 0
			1,107 12 0				
To Deposits		.....	50 0 0	*By Inter-Departmental Transfers—*			
To Forest Cash Remittances (Local)—							
Forest cheques drawn		3,56,385 0 2		Public Works Department, State Railways	32,951 5 4	.....	
Inter-divisional transfers		9,456 14 9		Public Works Department, Ordinary Branches	8,137 9 5	.....	
			3,65,841 14 11			41,088 14 9	
To Advances recoverable		.....	1,67,749 5 9				
„ Suspense		.....	1,395 3 0	Military Department, Bengal		0 5 6	
To Account-current (other Governments)—				*By Civil Department—*			
Remittances from Government of India		20,978 2 5	.....				
Remittances from Government of Bengal		52 11 5		Jails	1,908 15 4	.....	
			21,030 13 10	Police	7,021 7 0	.....	
To Inter-Departmental Transfers—				Miscellaneous	731 6 10	.....	
						9,661 13 2	
Public Works Department, State Railways	881 5 0	.....					
Public Works Departmedt, Ordinary Branches	17 9 6	.....					
		898 14 6		Telegraph Department		127 12 1	
Military Department, Bengal		1,525 7 11		Marine Department		861 4 4	
							51,740 1 10
To Civil Department—							
Jails	47 12 6	.....		By Cash balances		.....	755 15 4
Police	5,200 0 0	.....					
Mathematical Instrument Department	96 0 0	.....					
Survey of India Department	3 0 0	.....					
Miscellaneous	6,055 7 3	.....					
		11,402 3 9					
Marine Department		799 4 0					
			14,635 14 2				
Total		...	23,04,444 2 6	Total		...	23,04,444 2 6

CALCUTTA,
the 15th September 1893.

J. C. BOSE,
Assistant Comptroller-General (Forests).

Dr. FORM NO. 62.—*Statement showing Account-Current in the Western Circle from 1st April 1892 to 30th June 1893.* *Cr.*

1		2	3	4		5	6
WESTERN CIRCLE.		Rs. A. P.	Rs A. P.	WESTERN CIRCLE.		Rs. A. P.	Rs. A. P.
To Cash balances		.....	32 7 6	By expenditure as per Annual Summary Form No. 61		.....	2,05,434 5 2
To VIII.—Assessed Taxes—				By Deposits		.....	
Income-tax deductions from salaries		2,444 4 5		*By Forest Cash Remittances (Local)—*			
Revenue as per Annual Summary Form No. 61		.....	5,51,315 3 8	Remittances to treasuries		5,48,705 7 11	
To Service Funds—				Inter-divisional transfers		5,430 8 0	
Civil Fund, Ordinary, Bengal		.....					5,54,135 15 11
Civil Fund, Additional, Bengal		.....		By Advances recoverable		.....	86,124 7 8
Military Fund, Bengal		.....		„ Suspense		.....	709 4 3
Military Fund, Madras		.....					
Military Orphan Fund, Bengal		.....		*By Account-current (other Governments)—*			
Uncovenanted Service Family Pension Fund, Bengal		1,859 14 0		Remittances to the Government of Central Provinces		61 6 0	
General Family Pension Fund		218 8 0		Remittances to the Government of Punjab		5 2 0	
			2,078 6 0	Remittances to the Government of Bombay		69 0 0	
Hindu Family Annuity Fund		.....					135 8 0
To Deposits		.....					
To Forest Cash Remittances (Local)—				*By Inter-Departmental Transfers—*			
Forest cheques drawn		1,88,712 8 3		Public Works Department, Ordinary Branches		1,445 8 10	
Inter-divisional transfers		7,334 14 8		Military Department		.....	
			1,96,047 6 11				
To Advances recoverable		.....	87,282 7 3	*By Civil Departments—*			
„ Suspense		.....	211 1 5		Rs. A. P.		
To Account-current (other Governments)—				Jail	892 8 0	.....	
Remittances from Government of Central Provinces		340 0 0		Police	385 8 0	.....	
Remittance from Government of Punjab		5 2 0		Survey of India Department	9 0 0	.....	
Remittances from Government of Bombay		69 0 0		Miscellaneous	395 11 2	.....	
			414 2 0			1,682 11 2	
To Inter-Departmental Transfers—				Telegraph Department		25 0 0	
Public Works Department		.....		Marine Department		9,988 14 8	13,142 2 8
Military Department, Bengal		796 4 4					
To Civil Department—				By Cash balances		.....	48 12 6
	Rs. A. P.						
Jail	22 5 0	.....					
Police	37 8 0	.....					
Mathematical Instrument Department	756 6 0	.....					
Survey of India Department	404 5 0	.....					
Miscellaneous	7,874 6 0	9,094 14 0					
Telegraph Department		25 0 0					
Marine Department		9,988 14 8	19,905 1 0				
Total		.....	8,59,730 8 2	Total		.....	8,59,730 8 2

CALCUTTA:
The 15th September 1893.

J. C. BOSE,
Assistant Comptroller-General (Forests).

ANNUAL FORM NO. 62A.—*Statement showing Account-Current of the Eastern and Western Circles from 1st April 1892 to 30th June 1893.*

1	2	3	4	5	6	7	8
	Eastern circle	Western circle	Total.		Eastern circle	Western circle.	Total.
	Rs A. P.	Rs. A. P	Rs. A. P				
To Cash balances	1,549 8 7	32 7 6	1,582 0 1	By Expenditure as per Annual Summary Form No. 61	3,51,378 15 2	2,05,434 5 2	5,56,813 4 4
To FIII—Assessed Taxes—				„ Deposits	100 0 0	.....	100 0 0
Income-tax deductions from salaries	3,978 10 9	2,444 4 5	6,422 15 2	*By Forest Cash Remittances (Local)—*			
Revenue as per Annual Summary, Form No. 61	17,27,114 15 6	6,51,315 3 8	22,78,430 3 2	Remittances to treasuries	16,77,508 15 10	5,48,705 7 11	22,26,214 7 9
				Inter-divisional transfers	8,495 3 5	5,430 8 0	13,925 11 5
To Service Funds—							
				By Advances recoverable	1,99,837 14 11	86,124 7 8	2,85,962 6 7
Civil Fund, Ordinary, Bengal				By Suspense	925 12 0	709 4 3	1,635 0 3
Civil Fund, Additional, Bengal							
Military Fund, Bengal				*By Account-current (other Governments)—*			
Military Fund, Madras				Remittances to the Government of India	13,701 4 0	.....	13,701 4 0
Military Orphan Fund, Bengal				Remittances to the Government of Central Provinces	.....	61 6 0	61 6 0
Uncovenanted Service Family Pension Fund, Bengal	1,107 12 0	1,859 14 0	2,967 10 0	Remittances to the Government of Punjab	.....	5 2 0	5 2 0
General Family Pension Fund	.....	218 8 0	218 8 0	Remittances to the Government of Bombay	.....	69 0 0	69 0 0
Hindu Family Annuity Fund		.....					
To Deposits	50 0 0	.....	50 0 0	*By Inter-Departmental Transfers—*			
To Forests Cash Remittances (Local)—				Public Works Department, State Railways	32,951 5 4	.....	32,951 5 4
Forest cheques drawn	3,56,385 0 2	1,88,712 8 3	5,45,097 8 5	Public Works Department, Ordinary Branches	8,137 9 5	1,445 8 10	9,583 2 3
Inter-divisional transfers	9,456 14 9	7,334 14 8	16,791 13 5				
To Advances recoverable	1,67,749 5 9	87,282 7 3	2,55,031 13 0	Military Department, Bengal	0 5 6	.....	0 5 6
„ Suspense	1,395 3 0	211 1 5	1,606 4 5				
To Account-current (other Departments)—				*By Civil Departments—*			
Remittances from Government of India	20,978 2 5	.....	20,978 2 5	Jail	1,908 15 4	892 8 0	2,801 7 4
Remittances from Government of Bengal	52 11 5	.....	52 11 5				
Inter-departmental transfers, Central Provinces	.....	340 0 0	340 0 0	Police	7,021 7 0	385 8 0	7,406 15 0
Inter-departmental transfers, Punjab	.....	5 2 0	5 2 0				
Inter departmental transfers, Bombay	.....	69 0 0	69 0 0	Survey of India Department	.....	9 0 0	9 0 0
Public Works Department, State Railways	881 5 0	.....	881 5 0				
Public Works Department, Ordinary Branches	17 9 6	.....	17 9 6	Miscellaneous	731 6 10	395 11 2	1,127 2 0
To Military Department, Bengal	1,525 7 11	796 4 4	2,321 12 3				
To Civil Departments—				Telegraph Department	127 12 1	25 0 0	152 12 1
Jail	47 12 6	22 5 0	70 1 6				
Police	5,200 0 0	37 8 0	5,237 8 0	Marine Department	861 4 4	9,988 14 8	10,850 3 0
Mathematical Instrument Department	96 0 0	756 6 0	852 6 0				
Survey of India Department	3 0 0	404 5 0	407 5 0				
Miscellaneous	6,955 7 3	7,874 6 0	13,929 13 3				
Telegraph Department	.....	25 0 0	25 0 0				
Marine Department	799 4 0	9,988 14 8	10,788 2 8	By Cash balances	755 15 4	48 12 6	804 11 10
Total	23,04,444 2 6	8,59,730 8 2	31,64,174 10 8	Total	23,04,444 2 6	8,59,730 8 2	31,64,174 10 8

FORM NO 63 · PRESCRIBED].—*Revenue received and Outstandings on account of Revenue in the Eastern and Western Circles for the year 1892-93.*

Division	Particulars.	Outstandings at commencement of year	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the department at end of year	Remarks
1	2	3	4	5	6	7	8
	EASTERN CIRCLE.	Rs A P	Rs A P	Rs A P	Rs A. P	Rs. A. P	
Bhamo . .	Revenue received during 1892-93 ...	5,469 3 9(a)	2,73,364 6 7	2,78,833 10 4	2,78,833 10 4	..	(a) The outstanding shown in last year's report was Rs 4,378-12-5. The outstanding due from Hadji Mahomed Hadji, lessee, was, by an error of calculation, short-held by Rs. 1,090-7-4, hence the difference
Katha	Ditto	11,563 12 3	2,96,057 1 5	3,07,620 13 8	3,05,689 11 6	1,931 2 2	
Mandalay ..	Ditto	.....	94,959 5 5	94,959 5 5	94,959 5 5	.....	
Mu	Ditto	619 15 1	1,81,339 1 4	1,81,959 0 5	1,81,959 0 5	.....	
Pyinmana . ..	Ditto	— 30 10 0	6,58,805 7 0	6,58,774 13 0	6,58,775 7 0	— 0 10 0	
Direction ...	Ditto	15,850 0 0(b)	28,616 0 4	44,466 0 4	35,316 0 4	9,150 0 0	(b) In last year's report the outstanding at end of year 1891-92 was shown as Rs. 22,050, but the rents due for 1891 from Hsataung and Kentaung (Möngpu) have since been reduced by Rs 200 and Rs 6,000 respectively The whole amount outstanding has since been recovered.
	Total Eastern Circle ...	33,472 5 1	15,33,141 6 1	15,66,613 11 2	15,55,533 3 0	11,080 8 2	
	WESTERN CIRCLE.						
Direction .	Revenue received from April 1892 to March 1893 ...	..	508 3 6	508 3 6	508 3 6	.....	
Upper Chindwin ...	Ditto ...	.....	9,856 9 3	9,856 9 3	9,856 9 3	.....	
Lower Chindwin ..	Ditto ...	.. ..	69,553 14 10	69,553 14 10	69,521 14 10	32 0 0	
Yaw	Ditto ...	.....	3,71,358 9 8	3,71,358 9 8	3,71,281 9 8	77 0 0	
Minbu	Ditto ...	767 8 9	69,498 9 8	70,266 2 5	69,927 7 5	338 11 0	
	Total Western Circle ...	767 8 9	5,20,775 14 11	5,21,543 7 8	5,21,095 12 8	447 11 0	
	GRAND TOTAL UPPER BURMA ..	34,239 13 10	20,53,917 5 0	20,88,157 2 10	20,76,628 15 8	11,528 3 2	

FORM NO. 63 [PRESCRIBED].—*Revenue received and Outstandings on account of Revenue in the Eastern and Western Circles from 1st April 1892 to 30th June 1893*—concluded.

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the department at end of year.	Remarks.
1	2	3	4	5	6	7	8
	EASTERN CIRCLE.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Bhamo	Revenue received from April 1892 to June 1893 ...	5,469 3 9 (a)	3,95,337 1 6	4,00,806 5 3	4,00,806 5 3	.....	(a) The outstanding shown in last year's report was Rs. 4,378-12-5. The outstanding due from Hadji Mahomed Hadji, lessee, was, by an error of calculation, short-held by Rs. 1,090-7-4; hence the difference.
Katha	Ditto ...	11,563 12 3	3,17,824 8 11	3,29,388 5 2	3,27,726 13 0	1,661 8 2	
Mandalay	Ditto ...	.....	1,04,169 12 6	1,04,169 12 6	1,04,169 12 6	.....	
Mu	Ditto ...	619 15 1	1,87,852 10 9	1,88,472 9 10	1,88,472 9 10	.....	
Pyinmana	Ditto ...	— 30 10 0	6,70,422 2 7	6,70,391 8 7	6,70,392 2 7	— 0 10 0	
Direction	Ditto	15,850 0 0 (b)	28,847 4 4	44,697 4 4	35,547 4 4	9,150 0 0	(b) In last year's repost the outstanding at end of year 1891-92 was shown as Rs. 22,050, but the rents due for 1891 from Hsatung and Kengtung (Möngpu) have since been reduced by Rs. 200 and Rs. 6,000 respectively. The whole amount outstanding has since been recovered.
	Total Eastern Circle ...	33,472 9 1	17,04,453 8 7	17,37,925 13 8	17,27,114 15 6	10,810 14 2	
	WESTERN CIRCLE.						
Direction	Revenue received from April 1892 to June 1893 ...	.....	578 3 6	578 3 6	578 3 6	.....	
Upper Chindwin ...	Ditto ...	.....	22,849 8 3	22,849 8 3	22,849 8 3	.....	
Lower Chindwin ...	Ditto ...	.....	80,468 7 6	80,468 7 6	80,468 7 6	.....	
Yaw	Ditto ...	.....	3,73,321 7 10	3,73,321 7 10	3,73,297 15 10	23 8 0	
Minbu	Ditto ...	767 8 9	73,430 3 5	74,197 12 2	74,121 0 7	76 11 7	
	Total Western Circle ...	767 8 9	5,50,647 14 6	5,51,415 7 3	5,51,315 3 8	100 3 7	
	GRAND TOTAL UPPER BURMA ...	34,239 13 10	22,55,101 7 1	22,89,341 4 11	22,78,430 3 2	10,911 1 9	

FORM NO. 64.—*Statement showing Outstandings and Liabilities on account of Contractors and Disbursers in the Eastern and Western Circles for the year 1892-93.*

Division.	Department Debtor.			Department Creditor.			Balance due		Remarks.
	At commencement of year	Recoveries in cash and value of supplies and work done during the year	At close of year.	At commencement of year	Payments made during year.	At close of year	To department (outstandings).	By department (liabilities).	
1	2	3	4	5	5	7	8	9	10
EASTERN CIRCLE.	Rs. A. P.	Rs A P.	Rs A. P.	Rs. A P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A P.	
Direction	.....	21,738 0 7	21,738 0 7	1,109 0 4	28,884 12 7	29,993 12 11	8,355 12 4	... ..	
Bhamo	.....	22,774 1 10	22,774 1 10	1,296 6 2	21,686 3 4	22,982 9 6	208 7 8	... ..	
Katha	0 10 6	31,659 15 0	31,660 9 6	1,976 5 7	32,238 9 7	34,214 15 2	2,554 5 8	... ..	
Mandalay	...	26,037 8 8	26,037 8 8	2,465 8 11	24,629 6 8	27,154 15 7	1,117 6 11	... ..	
Mu	... ..	2,005 6 2	2,005 6 2	1,880 4 0	2,222 7 6	4,102 11 6	2,097 5 4	.....	
Pyinmana	.. .	23,446 13 1	23,446 13 1	799 4 9	23,713 8 3	24,512 13 0	1,085 6 7	19 6 8	
Total Eastern Circle ...	0 10 6	1,27,661 13 4	1,27,662 7 10	9,526 13 9	1,33,434 15 11	1,42,961 13 8	15,318 12 6	19 6 8	
WESTERN CIRCLE.									
Direction	.....	8,009 8 4	8,009 8 4	.....	9,393 1 0	9,393 1 0	1,383 8 8	...	
Upper Chindwin	..	8,022 2 8	8,022 2 8	..	9,292 8 0	9,292 8 0	1,365 8 0	95 2 8	
Lower Chindwin	.....	26,256 0 5	26,256 0 5	6,007 9 9	22,512 6 6	28,520 0 3	2,263 15 10	... ..	
Minbu	... ...	23,147 1 6	23,147 1 6	1,306 8 3	22,711 12 6	24,018 4 9	871 3 3	.. ..	
Yaw	.. ...	5,828 6 2	5,828 6 2	16 2 0	5,905 3 5	5,921 5 5	92 15 3	.....	
Total Western Circle ..	.....	71,263 3 1	71,263 3 1	7,330 4 0	69,814 15 5	77,145 3 5	5,977 3 0	95 2 8	

FORM NO. 64.—*Statement showing Outstandings and Liabilities on account of Contractors and Disbursers in the Eastern and Western Circles from 1st April 1892 to 30th June 1893.*

Division.	Department Debtor.			Department Creditors.			Balance due		Remarks.
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings)	By department (liabilities).	
1	2	3	4	5	6	7	8	9	10
EASTERN CIRCLE.	Rs. A. P	Rs. A. P.	Rs. A. P.	Rs. A. P	Rs A P.	Rs A. P	Rs. A. P.	Rs. A. P.	
Direction	.....	30,570 7 5	30,570 7 5	1,109 0 4	34,484 12 7	35,593 12 11	5,023 5 6	... ..	
Bhamo	.....	25,614 3 8	25,614 3 8	1,296 6 2	24,627 7 6	25,923 13 8	309 10 0	... ..	
Katha	0 10 6	44,028 11 7	44,029 6 1	1,976 5 7	46,304 8 6	48,280 14 1	4,251 8 0	.....	
Mandalay	.... .	32,130 2 11	32,130 2 11	2,465 8 11	30,342 5 5	32,807 14 4	677 11 5	.. ..	
Mu	.....	4,503 0 6	4,503 0 6	1,880 4 0	2,722 7 6	4,602 11 6	99 11 0	.....	
Pyinmana	.. .	30,902 11 8	30,902 11 8	799 4 9	61,356 5 5	62,155 10 2	31,331 4 0	78 5 6	
Total Eastern Circle	0 10 6	1,67,749 5 9	1,67,750 0 3	9,526 13 9	1,99,837 14 11	2,09,364 12 8	41,693 1 11	78 5 6	
WESTERN CIRCLE.									
Direction	.	10,882 9 2	10,882 9 2	....	12,319 2 10	12,319 2 10	1,436 9 8	... .	
Upper Chindwin .. .	.	8,799 0 8	8,799 0 8	.....	9,772 1 10	9,772 1 10	1,023 1 2	50 0 0	
Lower Chindwin	.. ...	31,743 2 0	31,743 2 0	6,007 9 9	27,238 2 6	33,245 12 3	1,502 10 3	.....	
Minbu	.. ...	28,431 1 9	28,431 1 9	1,306 8 3	28,733 6 7	30,039 14 10	1,608 13 1	.....	
Yaw	.. .	7,426 9 8	7,426 9 8	16 2 0	8,061 9 11	8,077 11 11	651 2 3	.....	
Total Western Circle ...	.....	87,282 7 3	87,282 7 3	7,330 4 0	86,124 7 8	93,454 11 8	6,222 4 5	50 0 0	

CALCUTTA:
The 15th September 1893.

J. C. BOSE,
Assistant Comptroller-General (Forests).

FORM NO. 65.—*Statement showing the Financial Results in the Eastern and Western Circles for the year 1892-93.*

Division.	Timber and other produce removed from the forests by Government agency.		Other revenue.		Formation, protection, and improvement of forests.	Total.		Remarks.
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.	
1	2	3	4	5	6	7	8	9
	Rs.	Rs	Rs	Rs	Rs.	Rs.	Rs.	
EASTERN CIRCLE.								
Bhamo	2,554	3,715	2,76,280	21,160	21,698	2,78,834	46,573	
Katha	3,694	1,502	3,01,996	28,492	39,454	3,05,690	69,448	
Mandalay	.....	.....	94,959	24,645	25,600	94,959	50 245	
Mu	275	... .	1,81,684	13,914	13,891	1,81,959	27,805	
Pyinmana	.....	.....	6,58,775	26,092	36,438	6,58,775	62,530	
Shan States	.. .	... ..	28,790	11,419	11,849	28,790	23,268	
Direction...	.....	.....	6,526	..	.....	6,526	.....	
Total Eastern Circle	6,523	5,217	15,49,010	1,25,722	1,48,930	15,55,533	2,79,869	
WESTERN CIRCLE								
Direction	.....	.....	508	...	.. ..	508	.....	
Upper Chindwin	.....	... ..	1,64,822	13,860	12,356	1,64,822	26,216	
Lower Chindwin	832	832	2,62,087	26,972	27,360	2,62,919	55,164	
Yaw	4,702	... ..	30,246	15,012	16,806	34,948	31,818	
Minbu	.....	441	57,899	23,103	25,137	57,899	48,681	
Total Western Circle ...	5,534	1,273	5,15,562	78,947	81,659	5,21,096	1,61,879	
GRAND TOTAL UPPER BURMA ...	12,057	6,490	20,64,572	2,04,669	2,30,589	20,76,629	4,41,748	

FORM NO 65.—*Statement showing the Financial Results in the Eastern and Western Circles from 1st April 1892 to 30th June 1893.*

Division.	Timber and other produce removed from the forest by Government agency		Other revenue.		Formation, protection, and improvement of forests.	Total.		Remarks
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts	Charges.	
1	2	3	4	5	6	7	8	9
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
EASTERN CIRCLE								
Bhamo	10,254	3,784	3,90,552	25,356	26,114	4,00,806	55,254	
Katha	3,694	1,510	3,24,033	35,361	47,913	3,27,727	84,784	
Mandalay	.....	... .	1,04,170	32,227	33,410	1,04,170	65,637	
Mu	275	...	1,88,198	18,046	18,472	1,88,473	36,518	
Pyinmana	.....	.....	6,70,392	31,925	48,717	6,70,392	80,642	
Shan States	.....	..	28,790	13,992	14,552	28,790	28,544	
Direction...	.....	.. ...	6,757	.. ...	.....	6,757	...	
Total Eastern Circle ...	14,223	5,294	17,12,892	1,56,907	1,89,178	17,27,115	3,51,379	
WESTERN CIRCLE.								
Direction	.....	... ..	578	... ..	.. .	578	....	
Upper Chindwin		.. ...	1,77,814	18,491	16,831	1,77,814	35,328	
Lower Chindwin	832	832	2,73,262	33.197	34,185	2,74,094	68,314	
Yaw	4,702	...	32,262	18,908	21,804	36,964	40,712	
Minbu	....	441	61,865	28,738	32,001	61,865	61,180	
Total Western Circle ...	5,534	1,273	5,45,781	99,340	1,04,821	5,51,315	2,05,434	
GRAND TOTAL UPPER BURMA ...	19,757	6,567	22,58,673	2,56,247	2,93,999	22,78,430	5,56,813	

APPENDIX A.

Statement exhibiting the cost of feed and keep of Elephants of the Forest Department from 1st April 1892 to 30th June 1892 as compared with that of the Commissariat Department for the same period.

Division	Number of elephants at the beginning of the year.	Number of elephants received during the year	Casualties during the year.	Transferred to other divisions during the year.	Number at the close of the year.	Cost of feed.	Cost of keep including gear, &c.	Cost of medicines.	Total expenditure during the year	Average monthly cost per animal of the Forest Department	Average monthly cost per animal of the Commissariat Department	Amount paid by officers for carriage of elephants	Value of labour in cash receipts and work performed.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Eastern Circle.						Rs.	Rs.	Rs	Rs.	Rs. A. P.	Rs. A. P.	Rs	Rs.	
Bhamo	5	...	1	1	3	28	2,038	18	2,084			474	...	Killed by another elephant, 22nd September 1892.
Katha	5	3	1	1	6	8	2,284	22	2,314			631	...	Died 14th October 1892.
Mandalay . .	3	...	1	1	2	11	1,042	1	1,055			90	...	
Mu	3	...	...	...	3	...	1,330	1	1,331	37 8 0	62 4 0	379	...	
Pyinmana	4	2	1	1	4	28	1,564	32	1,619			201	...	Died on 25th September 1892.
Shan States	4	...	1	...	3	11	2,844	...	2,855			290	...	Does not include one calf born on 30th April 1890.
Direction	3	1	...	...	4							582	...	Does not include one calf born on 24th December 1892. Lost, 4th January 1891, written-off this year.
Total ...	27	6	4	4	25	81	11,103	74	11,258	37 8 0	62 4 0	2,647	...	

Statement exhibiting the cost of feed and keep of Elephants of the Forest Department from 1st April 1892 to 30th June 1893 as compared with that of the Commissariat Department for the same period.

Division.	Number of elephants at the beginning of the year.	Number of elephants received during the year	Casualties during the year	Transferred to other divisions during the year.	Number at the close of the year	Cost of feed.	Cost of keep including gear, &c.	Cost of medicines.	Total expenditure during the year	Average monthly cost per animal of the Forest Department.	Average monthly cost per animal of the Commissariat Department.	Amount paid by officers for carriage of elephants.	Value of labour in cash receipts and work performed	Remarks.
	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Western Circle.						Rs.	Rs.	Rs	Rs	Rs. A. P.	Rs. A. P.	Rs.	Rs	
Direction	..	6	2	1	3	26	830	...	856			374	..	
Upper Chindwin .	...	6	...	1	5	...	913	...	913			233	..	
Lower Chindwin ...	9	2	...	6	5	8	2,445	18	2,471	29 12 0	62 4 0	578	..	
Yaw	2	1	...	...	3	11	994	15	1,020			665	...	
Minbu	5	2	2	2	3	52	1,399	69	1,520			184	...	Includes one elephant astray since January 1893
Total ...	16	17	4	10	19	97	6,581	102	6,780	29 12 0	62 4 0	2,034		
Grand Total Upper Burma	43	23	8	14	44	178	17,684	176	18,038	34 3 0	62 4 0	4,681	...	

APPENDIX B.

List of Buildings in the several Divisions exceeding Rs. 200 in Value for the year 1892-93.

Division.	Number.	Name of building.	Station	Rent.	Remarks.
1	2	3	4	5	6
		EASTERN CIRCLE.			
		(a) Buildings for which rent is payable and rent.		Rs. A. P	
Bhamo ...	1	Combined office and dwelling	Bhamo	22 0 0	
Katha ...	1		Katha	27 0 0	
Mandalay ...	1		Mandalay ...	60 0 0	
Mu	1	Dwelling	Ye-u	27 0 0	
Pyinmana ...	1		Pyinmana	22 0 0	
		(b) Buildings for which no rent is paid.			
Bhamo	1	Divisional office and bungalow ...	Shwegu ...	...	
	1	Revenue station	Bhamo ..		
Katha	1	Subdivisional office and bungalow.	Tigyaing	...	
	1		Bernardmyo	...	
	1		Mönymit ...	...	
Mandalay	1	Subdivisional office and bungalow.	Maymyo	...	
	1		Kyauksè	...	
Mu	1	Forest office	Ye-u	...	
	1	Revenue station-house	Myinmyu ..	...	
	1		Toktalôk ..		
	1	Drift station-house ...	Kyaukmyaung ...	...	
Pyinmana	1	Forest office	Pyinmana	...	
	1	Subdivisional office and bungalow	Yamèthin	...	
	1	Rest-house	Kôntha ...	...	
	1		Aingyi	...	
	1		Nganzat	..	
	1		Taungnyo ..	...	
		WESTERN CIRCLE			
		(a) Buildings on which rent is paid.			
Upper Chindwin	...	Nil ...	.....	...	The combined office and dwelling-house at Kindat, shown in last year's Appendix B, was entirely destroyed by fire on the 13th April 1893.
Lower Chindwin ...	1	Combined office and dwelling ...	Mônywa	32 0 0	
Yaw ..	1	Ditto ...	Pakôkku	30 0 0	
Minbu	1	Dwelling	Minbu	28 8 0	
		Buildings on which no rent is paid.			
Upper Chindwin	1	Depôt Forester's house ...	Kindat	...	
	1	Ranger's house	Maw	...	
Lower Chindwin	1	Depôt house ...	Alôn ...	...	
	1	Subdivisional forest office and bungalow.	Mingin	...	
Yaw	1	Ranger's house	Pauk	...	
	1	Depôt house ...	Pakôkku	...	
Minbu	1	Forest office ...	Minbu ...	...	
	1	Subdivisional forest office and residence	Taungdwingyi	...	
	1	Rest-house	Thitkèmyaung ...	...	

APPENDIX C.

Statement showing Summary of Valuation Surveys in the Eastern and Western Circles for the year 1892-93.

Forest division.	District or forest tract.	Name of forest.	Locality of survey.	No. of survey entered on map.	Area in acres counted out.	Teak trees counted out: Sound green teak. I	II	III	IV	Unsound green teak. I	II	III	IV	Girdled teak. Sound.	Unsound.	Under 6 feet girth.	Teak stumps. Full-sized.	Under-sized.	Dead teak trees.	Catch. Above 3 ft. girth.	Below 1 ft. 6 ins. or 3 ft. girth.	Below 1 ft. 6 ins. girth.	Stumps.	Padauk.	Name of officer by whom survey was made and remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Bhamo.	Bhamo	Hakan	Hakan to Pomnwè ...	1	1½	...	...	...	...	6	4	8	32	...	...	1	4	...	...	...	...	...	...	...	
			Pomnwè to Maunggôngpun...	2	3	...	...	...	...	2	1	3	77	...	...	...	18	...	...	...	...	...	...	...	
		Mawatôk	Up Mawatôk hill from Shitan	3	2½	...	...	...	...	2	1	...	12	...	1	1	24	...	...	...	...	...	...	...	
			Mawatôk to Krinkong ...	4	8	...	...	...	...	5	12	10	46	...	3	...	75	...	...	...	...	...	...	...	
	Kaukkwè ...	Kaukkwè	Aungsachaung to Mawatôk...	5	4½	...	...	...	...	9	10	5	15	...	...	2	38	...	...	...	...	...	...	...	
			Segyi to Malatt ...	6	5	...	...	...	...	...	3	...	29	...	...	...	17	...	...	...	...	...	...	...	
			Segyi to Migè ...	7	8	...	...	...	...	...	2	6	75	...	...	4	41	...	...	...	...	...	...	...	
			Kyauktalôn East, along telegraph line.	8	14	...	...	...	...	38	19	52	147	...	...	1	91	...	...	...	...	...	...	...	
	Indaw ...	Indaw	Mawchaung	9	8	...	...	...	...	2	5	12	71	...	2	...	53	...	...	...	...	...	...	...	
			Kekku	10	6½	...	...	...	...	3	2	6	67	...	1	...	22	...	...	...	...	...	...	...	
			Lagat chaung, from Lagat sakan to Mosit chaung.	IX	3	...	...	...	...	3	8	15	10	...	1	1	45	...	...	...	...	...	...	...	
	Mosit ...	Mosit	Mosit plains, Mawatôk, to Mosit sakan.	XI	17	...	...	...	...	44	43	38	47	1	...	...	26	...	11	...	...	...	...	...	
			East hills, Mawatôk, to Mosit sakan.	XII	17	...	...	...	...	48	54	48	83	5	2	3	46	...	26	...	...	...	...	...	
			Tungdu chaung ...	XIII	9	...	...	...	...	12	5	7	12	...	2	...	18	...	...	...	...	...	...	...	
	Kaukkwè ...	Nansônti	Malan chaung, Atet sakan, to Tapangkong.	XIV	5	...	...	...	...	13	10	14	58	2	...	6	26	...	...	...	...	...	...	...	Mr. W. T. Mc.Harg, officiating Deputy Conservator of Forests.
			Malanchaung-atet sakan to Malan-alè sakan.	XV	5	...	...	...	...	4	4	15	50	5	...	10	11	...	...	...	...	...	...	...	
			Saingsôn East, along Bhamo road.	XIII	6½	...	...	...	...	11	6	7	3	...	...	...	12	...	...	...	...	...	4	...	
			Laingsôn chaung west, to Balin sakan.	XIV	22	12	9	6	26	32	34	30	215	...	...	11	51	...	...	...	...	...	...	...	
			Mosit, left bank Namtang chaung, to Mosit crossing.	XV	23	11	10	33	103	45	52	117	309	2	2	9	289	...	...	...	...	...	...	...	
	Mosit ...	Mosit	Namlat chaung up Pwegaung road.	XVI	8¼	1	3	3	105	17	15	13	80	...	1	1	50	...	7	...	...	...	...	...	
			Thabyumyaing chaung ...	XVII	7	...	1	...	52	21	16	6	82	...	3	...	39	...	...	...	...	...	...	...	
			Indaung chaung, right bank...	XVIII	7	7	1	...	...	23	17	18	24	5	...	...	15	...	...	...	...	...	...	...	
			Naungpakat chaung ...	XIX	5	...	2	1	...	2	7	23	43	...	...	3	25	...	...	...	...	...	...	...	
			Lweilang chaung ...	XX	9½	6	4	...	5	50	19	8	10	...	...	...	35	...	...	...	...	...	...	...	
	Shwegu range.	Setkala reserve ...	The south watershed of the Tigwa chaung and along the Kundaw-Leywa road.	2	11½	19	14	141	1,041	17	2	21	464	10	...	1	27	...	...	...	...	...	...	...	Mr. C. R. Dun, Assistant Conservator of Forests.
			Total Bhamo division ...	...	217	58	44	184	1,332	409	351	482	2,061	30	18	54	1,098	...	44	...	...	...	...	...	
			Average per acre ...	...	...	·26	·2	·84	6·13	1·88	1·61	2·22	9·49	1·38	·08	·24	5·06	...	·2	...	...	...	...	...	
						7·45				15·22				·47											

Katha.	Meza range	Tatlwin proposed reserve	West of Tantabin ...	50	8	1	3	136	344	2	5	(a)	...	1	3	13	47	.	...	...	...	...	...	...	Mr E. A. O'Bryen, Deputy Conservator of Forests.
			Between Nantain and Legyin chaung.	56	14·4	...	...	176	832	..	.		..		...	...	235	...	...		...	...	...	...			
			Between Tantabin and Panyo.	54	7·6	...	...	38	781	...	...		...	...	...	22	108	..	...	...	...	.	...	...			
			Between Legyin and Thetkègyir	55	10·4	...	..	93	633	...	1		...	...	...	33	131	...	...	...	...	...	...				
			Between Thetkègyin and Panyo.	56	15	1	4	136	1,027	2	1		...	..	1	47	147	...	...	...	...	.	...	...			
			North of Thaunkun chaung	64	5·4	...	5	55	376	1	5		...	.	...	1	32	...	...	...	...	.	...	...			
			Watershed of Pailaw and Hawsein chaung.	65	10	.	...	22	81	1	4	24	330	...	1	1	23	...	...	...		. .	...	...			
			Bôn chaung ..	66	12	3	11	53	191	9	21	47	346	...	3	2	87	. .	...	...		...	...	...			
			Laungsu and Ngapi chaung...	67	9	...	...	27	85	..	3	29	257	...	1	.	31	...	..	...	...	...	...	...			
			Sources of Pa-aw chaung .	68	9	..	...	13	63	...	7	21	139	...	...	..	39	..			...	.		..			
			Total ...		98·8	5	23	749	4,413	15	47	121	1,072	1	9	119	880	.	. .	...	...	...	...	...			
			Average per acre ...			·05	23	7 58	44 66	·15	·47	1 22	10·85	·01	·09	1 2	8 90	.		. .	...	...	.	...			
								52 53				12 70				1 30											
		Pilè proposed reserve	Between Zavitin and Sadaing	35	6	8	12	31	53	2	1		...	..	3	4	27	...	...	...	...	...	...					
			Between Kaungbo and Sadaing	36	12	8	3	77	212	5	3		...	4	3	14	49	.	...	...	...	...	...					
			Kangôn forest	37	16	51	29	64	184	14	10	(a)	...	33	11	32	32	...	..		...	...	...	...				
			Ditto	38	11	2	28	149	437	9	7			2	3	8	61				...	...	...	...				
			On hill near Kaungba ...	39	17·5	57	49	183	395	8	13		...	7	3	13	43	...	...	.	...	...	...	...				
			Total . ..		62 5	126	121	504	1,281	38	34	...	...	46	23	71	212	..	. .	...	...	...		.			
			Average per acre ..			2 01	1 93	8 06	20 49	6	54			73	36	1 13	3 39	.		...		...	...				
								3· 51				1 15				2 24											
		Pyintè proposed reserve.	Mu-Meza watershed, south of Gyodaung	40	22	19	11	197	459	10	17		...	4	5	21	79	1	...	..	..	...	...	...				
			Onbintaung Kyayatat ...	25	13	21	11	39	76	9	7		...	15	2	28	51		.	...	...	...	...	...				
			Right watershed of Kyayatat	26	15 5	7	5	25	63	6	2		...	2	...	5	55	—	..	...	...	...	...	...				
			Tabyocho forest . .	27	17	5	1	38	95	9	6		...	2	...	3	87	..	...	...	...	.	...	...				
			Between Kapyintaung and Kywegaw.	28	25	...	3	85	873	5	9		...	.	...	64	272	..	..	...	...	.	...	...				
			Between Kywegaw and Kyutaw.	29	7	..		29	313	...	1	(a)	...	...	...	9	42			...	...	...	...	...				
			West of Kyutaw .	30	14 2	...	4	103	674	1	3		...	...	...	30	101	...	..	...	...		..	..				
			North and north-west of Kyutaw.	31	13	1	1	107	535	2	57		...	.	.	42	103	...	...	...	...	...	..	..				
			Near mouth of Shaukchogôn chaung	32	2·5	1	2	15	55	1	..		...	8	1	6	8	...	...	..	...	...	...	...				
			Along Shaukchogôn chaung ..	33	18·4	23	22	139	546	21	11		...	97	9	48	73	...	...	...	..	..	..	..				
			Letwè chaung	34	10	12	10	69	273	10	5		...	43	5	24	35	...	...	.	.	...		..				
			Total		157·6	89	70	846	3,952	74	118	..	..	171	22	280	906	..	...		...	..	.	..				
			Average per acre			0 56	44	5 36	25 13	46	·74		.	1·08	14	1·77	5·74											
								31 51				1 21				3 00											
		Nankan proposed reserve	North-west of Mawkaladaw .	41	7 6	2	14	133	646	2	3		.	...	...	7	144	...	...	.	...	...	...	.				
			Ditto ..	42	10	1	3	167	845	3	2		...	...	...	8	181	...	...	...	...	...	...	..				
			Between Mawkaladaw and Linne.	43	4	1	1	55	293	...	2		...	1	..	10	82	...	..	...		.	...	...				
			Linne	44	12·5	.	6	139	853		4		...	...	2	19	205	..	...	...	...	..	...	..				
			Between Nankan and Yônsôn.	45	8·8	3	1	53	325	...	8		...	2	...	25	18	...	...	.		...	...	...				
			Between Yônsôn and Ngangè chaung	46	14 2	4	28	96	268	3	3		...	...		13	69	.	...	..	...	.	...	.				
			North of Yônsôn ...	47	19	3	1	284	1,262	1	7	(a)	...	...	...	42	323	...	...	...	..	..	...	...				
			Between Magyibin and Thetkegyin	48 49	5	11	9	13	108	8	1		...	2	1	9	27		...	..	...		...	...				
			Between Thetkegyin and Nantain		23	2	14	391	1,183	7	3		...	...	2	39	137	.	...	...	...	...	...	...				
			Between Anmybin and Shinpa	51	6	...	1	43	415		...		...	...	...	2	23	...	..	...	...	...	...	..				
			Between Shinpa and Mayindâw	52	11	2		97	674	..	3		..	..	1	9	57	..		.	..		...					
			Nantain-Legyin road ..	57	6·6	0	2	53	653	..			...	..	..	15	43	...	...	...	...	...	...	...				
			North bank, Nantain chaung	58	3·5		9	41	247	...			...	...	...	...	41	..	...	...	...	...	...	...				
			Carried over ...		131 2	29	89	1,566	7,765	24	36		.	5	6	198	1,350	...	...	...	...	..	...	..				

(a) Classes III and IV not subdivided.

Statement showing Summary of Valuation Surveys in the Eastern and Western Circle for the year 1892-93—continued.

Forest division.	District or forest tract.	Name of forest.	Locality of survey.	No. of survey entered on map.	Area in acres counted out.	Teak trees counted out.												Dead teak trees	Catch.				Padauk.	Name of officer by whom survey was made and remarks.
						Sound green teak.				Unsound green teak.				Girdled teak.			Teak stumps							
						I	II	III	IV	I	II	III	IV	Sound	Unsound	Under 6 feet girth.	Full-sized.	Under-sized.		Above 3 ft girth	Below 1 ft. 6 ins. or 3 ft girth	Below 1 ft 6 ins. girth.	Stumps		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Meza range—*concluded*		Nankan proposed reserve—*concluded.*	Brought forward ...	.	131·2	29	89	1,566	7,765	24	36	..	.	5	6	198	1,350	...	..	..	...	...	...		
			North bank, above Yônzôn chaung.	59	2·6	...	2	27	179	..	2	(a)	..	...	...	...	53	...	...	..	.	...	...	..	
			Aungbin, Malangan ...	60	8·2	...	2	17	295	..	3		...	...		9	51	...	.	...	...		..	.	
			Tônmaw chaung ...	61	3·4	...	3	49	132	..	2		...	...	...	1	43	...	...	...	...	...	...	...	
			Chitdwin and Shinpa ...	62	13·5	6	39	101	741	..	..			...	...	...	69	...	...	...	...	..	...	...	
			Linne chaung ..	63	2·2	.	1	42	155	.	1		...	..	...	1	2	...	...	...	..			..	
			Total .	..	161 1	35	136	1,802	9,267	24	44			5	4	200	1,568	..	..	...		...	.		
			Average per acre .	...	...	·21	·84	11·18	57 52	·14	·27		...	·03	·04	1·29	9 73	...	...	...	...	.	.	...	
								69·77			·42					1 36									
		Proposed extension to Petsut reserve.	Napi forest	1	8	4	2	13	17	10	9		...	1	...	3	37	...	...	...	.	...	...	...	
			North-west of Napi ...	2	4	...	...	9	37	1	1		...	...	...	...	10	...	...	.	...	...	...	.	
			From Tônlon west to Railway.	15	35 5	3	4	59	195	6	5		...	1	...	5	97		...	...	..	...	...	...	
			Between Tônlôn and Pingwè	16	12	1	1	51	146	2	2		.	...	1	2	79	...	...	...	..	.	...	.	
			North of Tônlôn ...	17	12	1	..	53	162	3	5	(a)	.	1	...	3	82	...	..	..	.	...	..	...	
			Up Tônlôn chaung ..	18	20	5	11	51	103	8	3		...	2	...	5	83		...	...	...	...	..	...	
			North watershed of Tônlôn chaung	19	15	13	11	85	143	6	6		...	1	...	7	41	...	...	...	..	...	...	...	
			East of Pingwè ..	20	20	6	13	57	188	12	9		...	8	4	8	132	...	...	.	...	..	...	...	
			Along spure to south of No. 20	21	14	6	5	47	173	1	3		..	5	1	9	88	..	..	...	...	...		..	
			Total ...		130 5	39	47	425	1,164	39	43	...		19	6	42	648	..	.	..	..		...	..	
			Average per acre	...	...	·29	·36	3·25	8 02	·38	·33		...	·14	·04	·32	4·96	...		. .			.	...	Mr. E A O'Brien, Deputy Conservator of Forests.
								12·83			70					·51									
		Proposed extension to Auktaw reserve.	Wabè chaung ...	3	5	...	5	47	189	3	...	...	...	..	1	3	75	...	...	...	..	...	...	.	
			Left bank of Thè chaung ...	4	12	.	1	103	487	...	3	...	...	..	..	8	80	...	...	...	...		..	.	
			South of Auktaw	5	6	...	1	51	213	...	2	...	...	...	...	8	47	...	...	.	.		...	.	
			Total ...	...	23	..	7	201	889	3	5	..	...	..	1	19	211	...	...	...	..	.			
			Average per acre	...	.	..	·30	8·74	38 65	·13	·22	..	...	. .	04	82	9·17			...	..	...	...	...	
								47 69			35					·87									
		Proposed Nami reserve.	West of Alègyun	6	10	...	...	51	294	...	...	...	.	...	...	5	118	...	...	...	..	...	...	...	
			Between Alègyun and Yè chaung.	7	9	...	...	54	413	...	...	...	..	..		3	199	...	....	...	...	...	...	..	
			East of Yè chaung ...	8	7·5	...	...	23	374		1	...	...	...	...	1	149	...	...	...	.	...	...	...	
			Between Ye chaung and Taungôn.	9	4·6	..	...	31	271	..	...	...	...	.		1	91	...	..	...	..	...	...	...	
			Nyaungbintha to Nyaungsaungbu.	10	6·5	...	..	48	391	...	...	..	...	...	...	4	113	...		...	...	...	...	.	
			East of Nyaungsaungbu .	11	11 5	...	1	71	537	...	...	...	...	...	.	1	192	...	..	...	...	..	..	...	
			East of Filèbo ...	12	6·5	...	1	57	273	..	1	...	...	.	...	...	168	...	...	...	..	..	...	..	
			East of Nyungpayin ...	13	10	...	1	68	411	...	...	...	..	...	...	2	213	...	...	...	...	...	...	.	
			From Nyaungbintha to Kokaung.	14	4	.	..	9	58	..	...	...	...	...	.		38	..	...		...	...	...	.	
			Total ...		69 6	...	2	412	3,022	...	2	..	...	...		17	1,281	...	...	..	..	...	...	..	
			Average per acre ...	...	...	...	·04	5 92	43 42	...	·03	...	...	...	...	·24	18 40	...	...	.	...	...	...	...	
								49·38																	

Katha.	Shwebi range.	Kalat proposed reserve.	Left bank of Kalat chaung, on hills near Subôk chaung.	69	19	8	33	292	313	17	31	209	415	20	5	48	161	...	...	...	...	...	...	...
			Left bank of Kalat chaung, south of Hwèpala chaung.	70	5	1	3	71	78	5	9	50	117	4	1	13	39	...	...	..	...	...	...	..
			East of Thidawgaing to top of hills.	71	14	14	33	67	119	14	13	28	160	3	1	30	94	...	...	...	...	...	...	...
			On hills west of Budaung ...	72	4·5	35	41	45	84	7	3	31	97	7	...	11	29	...	...	...	...	...	...	...
			Across ridge west of Budaung	73	6·5	17	30	65	46	6	12	30	40	3	...	1	84	...	...	...	...	...	...	...
			east of Meza above Budaung	74	13	10	24	113	198	6	17	32	99	2	5	23	33	...	...	...	...	...	...	...
			West watershed of Nantat chaung.	75	7	21	31	66	82	9	17	64	93	3	2	7	38	...	...	..	...	...	...	...
			Total ...	..	69 0	106	195	719	920	64	102	444	1,021	42	14	133	478	...	...	...	...	...	...	...
			Average per acre ...	...		1·54	2·82	10·42	13·33	·92	1·47	6·43	14 79	·6	2	1·92	6·92	...	...	...	...	...	...	...
						28·11				23 63				2·74										
		Uyinbû forest, Nami reserve.	The watershed of the Ngapôk-sho and the road down to the Sipwa-Uyinbu road.	1	32	...	3	45	248	16	8	47	268	...	...	3	32	...	...	...	...	...	...	...
		Ngosin chaung	On the road going up Ngosin chaung.	3	4		1	15	12	1	5	21	137	1	...	5	18		...	..	...	...	...	.
		Namme reserve ...	North watershed of the Pakaung chaung.	4	16	42	31	48	81	36	17	28	490	8	...	2	14	..	...	...	...	...	...	...
		Tutaung chaung forest.	Road from the Tutaung chaung across to the Katgôn road.	5	4	...	...	7	15	1	1	9	70	...	...	...	3	...	...	...	...	...	...	...
		Namme reserve	South watershed of the Tutaung chaung.	6	11·5	31	14	18	190	24	6	8	101	...	...	12	8	...	...	...	...	...	...	...
			North watershed of the Kalaw chaung from the Kyaukpôn road towards Myenitaung.	7	5	.	...	2	32	1	2	3	19	...	1	...	6	...	.	...	...	...	...	...
			South watershed of the Paukbin chaung to its source.	8	8	1	2	15	208	11	6	7	51	...	2	...	36	...	...	...	...	...	...	...
		Kya-in	Road down to Kyasu from Hlesôn sakan.	9	6	...	...	7	155	2	3	4	55	...	...	...	14	...	..	...	...	...	...	...
			The Kyasu-Thinbawsôn road to the Paukpin chaung.	10	9·5	...	...	12	127	11	5	5	20	...	1	...	25	...	...	...	...	...	...	...
		Kwechaungdôn ...	High ground east of Kwechaungdôn forest.	11	3·5	...	...	2	193	7	4	8	84	...	...	...	37	...	...	...	...	...	...	...
		Namme reserve	Kundaw area, south boundary, from the Pawmipa-sho west.	12	13	...		42	295	5	3	6	72	...	...	2	55	...	...	...	...	...	...	...
			North boundary of Kundaw area on the Kya-in-Sinaung road.	13	6	...	...	10	333	...	...	8	81	...	...	2	12	...	...	...	...	...	...	...
		Kungyaung reserve ...	Kungyaung-Môlôn road from the Kanjanzat chaung to the Kundaw road.	14	15	...	...	23	186	5	12	22	82	...	...	...	22	...	...	...	...	...	...	...
		Maingtha reserve	Yônbo-atet-Sittôn road from the Maingtha chaung.	15	38	...	...	9	153	2	1	12	147	.	...	..	73	...	...	...	...	...	...	...
			Yonbo-atet-Sittôn road on the Gwegyaung chaung.	16	16	...	...	5	14	2	3		10	4	...	...	15	...	...	.	...	...	...	.
			Taungmè road down to the Sôkkyin chaung.	17	22	23	2	6	23	7	4	...	18	3	4	5	4	...	...	...	...	...	...	.
			Taungnyo hills and Kandaw-Letkat road down the Kandaw chaung and down towards Letkat.	18	30	35	17	14	141	20	7	5	12	1	1	2	2	...	...	...	...	...	...	...
			Tinkuntaung ridge from Tinkun chaung up to the Kawdaw road.	19	46	39	23	16	220	19	15	8	26	....	1	..	7	...	...	..	...	...	...	...
			Tinsitaung road to the head of the Mulin chaung.	20	47	48	30	27	23	18	16	11	6	...		...	...	...	...	...	...	...	..	...
			Watershed of the Tôngyauk and Maingtha chaung, north Palaunggwin-Kungyaung road.	21	44	62	23	36	220	23	17	8	16	2	1	...	2	...	...	...	...	...	...	...
			Watershed of the Maingtha chaung, Saka hill.	22	14	10	8	9	38	7	5	2	3	...	..	...	...	...	...	...	..	...	...	...
			Carried over ...		390 5	291	154	368	2907	216	140	225	1768	19	11	33	383	...	...	...	...	...	...	...

Mr. C. R. Dun, Assistant Conservator of Forests.

(a) Classes III and IV, not subdivided.

Statement showing Summary of Valuation Surveys in the Eastern and Western Circles for the year 1892-93—continued.

Forest division.	District or forest tract.	Name of forest.	Locality of survey.	No. of survey entered on map.	Area in acres counted out.	Teak trees counted out: Sound green teak. I	II	III	IV	Unsound green teak. I	II	III	IV	Girdled teak. Sound.	Unsound.	Under 6 feet girth.	Teak stumps. Full-sized.	Under-sized.	Dead teak trees.	Cutch. Above 3 ft. girth.	Below 1 ft. 6 ins. or 3 ft. girth.	Below 1 ft. 6 ins. girth.	Stumps.	Padauk.	Name of officer by whom survey was made and remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	27
Katha—*concluded.*	Shweli range—*concluded.*		Broughtforwarded.		390·5	291	154	368	2907	216	140	225	763	19	11	33	385	...	...	...	...	...	...	...	
		Maingtha reserve ...	On Tatankaung hill and Maingtha chaung north watershed.	23	67	29	25	147	245	23	11	29	28	...	...	2	...	...	...	...	...	...	...	...	Mr. C. R. Dun, Assistant Conservator of Forests.
		Namme reserve	Road above and below Mapaing village.	24	10	1	...	9	44	...	1	4	17	...	...	...	5	...	...	...	...	...	...	...	
			The Kyauktaung ridge between the Kungyaung-Loisaing road and the Chingran chaung.	25	36	81	10	22	106	24	10	2	14	...	...	...	8	...	...	...	...	...	...	...	
		Nampaw reserve	Along Lawa-Sinpigyi road from reserve boundary.	1	16	...	...	8	25	3	6	18	54	...	1	2	52	...	...	...	...	...	...	...	
			Along reserve boundary from Post No. 12, Molo-Bahè road.	2	38	16	41	43	67	11	32	28	50	3	...	10	27	...	...	...	...	...	...	...	
		Subôk ...	Near Pinyôk village	3	25	28	20	26	29	23	40	43	31	6	3	23	10	...	...	...	...	...	...	...	
				4	8	15	7	9	...	14	13	7	10	...	...	7	6	...	...	...	...	...	...	...	
		Nampaw reserve	Along Kachin taungya area, Post No. 69, to Makwè taung	5	81	50	69	45	16	81	83	87	69	16	6	58	21	...	...	...	...	...	...	...	
			Along reserve boundary from Nampaw chaung to foot of Kanazotaung.	6	32	8	18	40	28	25	16	57	49	1	10	2	47	...	...	...	...	...	...	...	
		Maingtha	Along Yanbo-Mangôn road, outside reserve.	7	10	...	...	7	35	...	4	21	63	...	...	...	23	...	...	...	...	...	...	...	
			Along Yanbo-Mangôn road from reserve boundary.	8	...	...	...	17	24	1	11	63	66	...	1	1	21	...	...	...	...	...	...	...	Mr. R. F. Lowis, Extra Assistant Conservator of Forests.
		Nahan reserve ...	Along Mangôn-Kota road from near Mana village.	9	82	...	3	35	33	7	25	62	69	...	...	5	64	...	...	...	...	...	...	...	
		Pyinlaha ...	Shweli bank near Pyinlaha ...	10	16·8	...	...	10	32	1	12	38	54	...	1	5	64	...	...	...	...	...	...	...	
		Nahan reserve ...	Along Kota-Mangôn road from Post No. 1 on Shweli bank	11	20·8	...	...	8	29	...	7	15	34	...	...	...	4	...	...	...	...	...	...	...	
		Kyauktaung	Upper Shweli right bank, opposite Nayôk village, on the hill-side.	12	8	...	1	17	34	...	2	12	40	...	...	...	25	...	...	...	...	...	...	...	
			Along bank of Shweli, opposite Nayôk.	13	10	...	...	23	23	4	7	24	68	...	...	...	72	...	...	...	...	...	...	...	
			On left bank of the Shweli between Molo and Hmèaw.	14	16	...	2	9	31	3	6	15	41	...	...	...	31	...	...	...	...	...	...	...	
			Bank of Shweli, nearly opposite Molo.	15	4	...	2	20	74	1	15	13	78	...	3	...	51	...	...	...	...	...	...	...	
			Along Molo-Kawlaw road from the foot of the hill to the ridge near Kawlaw village.	16	16	25	16	22	18	17	11	25	26	3	2	9	4	...	...	...	...	...	...	...	
			Total ...	...	897·1	544	368	885	3,796	454	442	788	2,629	42	38	157	920	...	...	...	...	...	...	...	
			Average per acre ...			·61	·41	·98	4·23	·51	·49	·88	2·93	·05	·04	·17	1·02	...	...	...	...	...	...	...	
							6·23				4·81				·26										

Mandalay. Upper Chindwin. Shibaw, Shan States.	Kônthasin	On main road between the two places.	1	132	28	25	34	431	15	8	3	7	5	7	21	15	15						
	Thagnaik chaung	Tributary on right bank of Mèhông river.	2	27	29	2		9	1				3										
	Wabyu	On left bank of Mèhông river round Mèhong village.	3	11	9	3	2	10					1			8	8						
Thônzè, Shan States, Mèhông river, and its tributaries.	Pôn	On right bank of Mèhông river, opposite Bambôn village.	4	27¾	1	5	16	105				1	3	2	1	2	2						
	Nyaungbin chaung	Feeder on right bank of Kebaung chaung flowing into right bank of Mèhông river.	5	30	26	4	5	11	1				4										Mr. H Calthrop, Deputy Conservator of Forests.
	Kelcung chaung	Tributary on right bank of Mèhông river.	6	33½	4	2	5	56					1		1	4	4						
	Pèlaw	On left bank of Mèhông river, east of road, from Nyandauk to Bambôn.	7	26½	6	3	10	53	1				1			1	1						
	Yebyan and Kyakiteiñ	On left bank of Mèhong river	8	60½	21	13	36	213	4	1	3	3	5	2	2	26	28						
		Total	...	347½	124	57	109	888	22	11	6	11	23	11	25	59	58						
		Average per acre	...		·36	·1	·31	2·55	·06	·03	·02	·03	·07	·03	·07	·17	·17						
					3·38				·14				·17										
Upper Chindwin. Chaungyi, Upper Chindwin.	Nankwan	Watershed of Nankwan and Nansi.	1	40	32	19	12	83		3													
		Right bank of Nankwan, south of Sindaing-Nansi road.	2	84	95	70	65	119	5				5	13									Country very broken and precipitous.
	Naupanlu	Left bank towards mouth	3	95	53	43	66	137															
		Leff bank higher up	4	40	76	48	57	122					3	6									
	Nansan	From mouth up left bank along ridge, then towards stream.	5	60	72	71	97	243					6	4		7							
		Left bank, higher up, above where stopped	6	68	124	82	103	235					2	11		17							
	Chaungyi Katha. Nansi	Right bank Nansi, half-way up stream	7	72	109	41	58	268					8	3		16	5						Country less broken, passing from rather low, gently sloping hills on the Nansi to the flat valley of Nansi
	Modè	Right bank Modè, above the mouth of the Naninya.	8	76	59	39	45	101					3	14		9	17						
		Total	...	535	620	413	506	1,308	5	3			27	51		49	22						Mr. H H. Forteath, Assistant Conservator of Forests.
		Average per acre	...	...	1·15	·77	·94	2·44					·05	·09		·09	·04						
					5·32								·14			·13							
	Nanthami	Left bank from mouth along ridge up to source of Htôn chaung	1	14	6	3	1	18					3	7		1		2					Six acres teak, rest mahaing.
		Right bank down to mouth of Koko chaung	2	8	8	6	5	12					3					1					Two acres teak between Kokochaung and Htôn chaung.
		Between the main stream	3	8	19	8	2	13	2	1	3		7										All through teak.
		Right across diagonally	5	21·5	84	60	57	175	17	10	31	2											All teak.
		Right due east to watershed of Chaungyi, then north, then along ridge above the stream.	4	8	52	21	52	90	12	6	10												
		Total		59·5	169	100	117	308	31	17	34	2	13			1		3					Mr C. W A. Bruce, Assistant Conservator of Forests
		Average per acre	...		2·84	1·68	1·96	5·17	·52	·28	·57	·03	21					·05					
					11·66				1·41														
	Nantakun	Right bank of Nantakun between the two large forks at the same.	6	14·4	73	48	51	96	9	3	3	5											All teak
		Opposite this on the Nantachein watershed.	7	10	80	32	30	80	28	6	3	6											
		Sources of the third large feeder on the right bank.	9*	10 4	40	30	40	86	45	24	16	4	6					19					* No 8, as mistake made on map has not been altered.
		Total	...	34 8	193	110	121	262	82	33	22	15	6					19					Mr C. W A Bruce, Assistant Conservator of Forests.
		Average per acre	...	...	5·54	3·16	3·47	7·52	2·35	·94	·63	·43	·17					·54					
					19·7				4·36														

Statement showing Summary of Valuation Surveys in the Eastern and Western Circles for the year 1892-93—continued.

Forest division.	District of forest tract.	Name of forest.	Locality of survey.	No. of survey entered on map.	Area of survey in acres.	Total trees counted out.													Dead teak trees.	Catch.				Padauk.	Name of officer by whom survey was made and remarks.
						Sound green teak.				Unsound green teak.				Girdled teak.			Teak stumps.			Above 3 feet girth.	Below 1 ft. 6 ins. to 3 ft. girth.	Below 1 ft. 6 ins. girth.	Stumps.		
						I	II	III	IV	I	II	III	IV	Sound.	Unsound.	Under 6 feet girth.	Full-sized.	Under-sized.							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	17	18	19	20	21	22	23	24	25
Nantainkwin—*concluded.*	Nankudin, Upper Chindwin.	Namlin	Right bank above gorge	11	4·8	33	15	24	20	22	8	5	3	...	..	..	...	...	9	...	...	...	...	...	
			Right bank higher up	12	14	72	35	36	108	38	11	17	3	43	...	...	22	...	32	...	...	...	...	...	
			Left bank below mouth of Nantama.	12	10·8	8	5	8	56	3	...	3	4	...	...	...	2	...	1	...	...	...	...	...	
			Road to Zebin from Nanli chaung.	13	30	100	44	37	222	23	13	20	8	.	...	...	15	...	16	...	...	...	...	...	
			Total	...	59·6	213	99	105	406	86	32	45	18	3	...	...	39	...	58	...	...	...	...	...	
			Average per acre	...	...	3·6	1·66	1·8	6·81	1·44	·53	·75	·3	·05	...	...	·65	...	·97	...	...	...	...	...	
						13·8				3·03															
		Dathwegyauk	Zibin across to Dathwegyauk, then to watershed of Chaungyi.	14	13·8	19	11	31	73	5	8	14	6	...		...	10	...	5	...	...	...	...	...	
	Katha		Average per acre	...	...	1·37	·79	2·24	5·28	·36	·57	1·01	·43	...	...	...	·72	...	·36	...	...	...	...	...	
						9·71				2·39															
		Lintôu	Lintôu and Nausapat watershed.	15	16·8	15	7	11	31	5	3	4	10	...	...	...	5	..	5	...	...	...	...	...	
			Average per acre	...	...	·89	·41	·65	1·84	·29	·17	·23	·59	...	...	...	·29	...	·29	...	...	...	...	...	
						3·8				1·3															
	Nantainkwin, Upper Chindwin.	Nantainkwin	Headwaters of Nantainkwin	16	14	29	10	34	67	9	4	7	7	2	1	5	63	...	3	...	...	...	...	...	Mr. C. W. A. Bruce, Assistant Conservator of Forests.
			Yansipa	17	6	35	4	10	19	3	...	3	5	...	...	...	1	...	7	...	...	...	...	...	
			Left Kyatchaung ...	18	9	50	14	15	36	3	1	2	3	...	...	...	2	...	10	...	...	...	...	...	
			Kodit kingaw	19	16	16	4	4	4	1	1	1	...	1	...	...	1	...	1	...	...	...	...	...	
			Right bank	20	8	12	4	3	3	2	1	1	...	...	...	...	2	...	2	...	...	...	...	...	
			Right bank, higher up ...	21	7	53	3	3	6	3	2	2	2	...	...	...	7	...	6	...	...	...	...	...	
			Kodit kingaw	22	30	117	31	37	55	13	7	16	7	...	...	...	...	...	7	...	...	...	...	...	
			Headwaters	23	24·5	128	26	54	37	16	8	5	3	...	...	...	...	...	21	...	...	...	...	...	
			Headwaters	24	20	70	21	31	46	17	6	6	2	...	...	...	...	...	9	...	...	...	...	...	
			Mansaga and Nantainkwin watershed.	25	5	29	8	6	1	4	2	4	...	..	...	...	...	...	7	...	...	...	...	...	
			Total	...	139·5	539	134	197	274	71	32	47	19	3	1	5	76	...	73	...	...	...	...	...	
			Average per acre	...	...	3·86	·96	1·4	·2	·5	·22	·33	·1	·02	...	·03	·54	...	·52	...	..	...	...	.	
						8·2				1·28															

Lower Chindwin.	Augyilin	Right bank ...	26	10	12	8	32	33	6	1	8	12	3	...	5	27	...	3	...	...	...	...	...
		Left bank ...	27	9	22	13	17	25	6	...	2	8	1	1	2	32	...	3	...	...	...	...	...
		Total ..	..	19	34	21	49	58	12	1	10	20	4	1	7	59	...	6	..	..	...	..	...
		Average per acre ...	...	...	1·78	1·10	2·57	3·05	·63	·05	·52	1·05	·21	·05	·36	3·1	...	·31	..	..	...	...	...
					8·52				2·26				·63										
	Panzit	Left bank	28	20	96	29	25	22	13	9	1	3	...	..	..	...	...	17	...	...	...	...	...
		Left bank, higher up ...	29	7	74	27	22	16	4	2	2	1	...	...	...	1	...	24	...	...	...	...	..
		Total ...	..	27	170	56	47	38	17	11	3	4	...	...		1	...	41	..	..	...	...	...
		Average per acre ...	...	...	6·29	2·07	1·74	1·4	·63	·4	·1	·14	...	...	...	·03	...	1·52	...	...	...	.	...
					11·52				1·29														
	Kantigyi	Namun chaung, right bank...	30	23	20	13	22	41	4	3	5	1	11	1	...	10	...	17	...	...	...	...	...
		Kantigale ...	31	20	101	31	52	61	14	1	2	2	3	1	...	22	...	20	...	...	...	...	...
		Kantigyi, right bank ...	32	20	168	12	30	163	12	3	...	...	2	...	3	16	...	9	...	...	...	...	..
		Kantigyi, left bank ...	33	12	29	6	8	13	...	...	...	...	...	2	...	...	...	5	...	...	...	...	..
		Total ...	..	75	258	62	112	278	30	7	7	3	16	4	3	48	.	47	...				...
		Average per acre ...		...	3·44	·83	1·5	3·7	·4	·09	·09	·04	·21	·05	·04	·64	..	·62	..	...	...	...	...
					9·47				·62				·3										
	Kanni	Nyaungbinhlè village to Palanbin chaung.	1	88	8	17	26	31	...	2	3	4	...	...	...	12	..	...	10	24	5	13	...
		Palanbin chaung to the Mahudaung range.	2	33·2	2	19	33	54	.	...	4	24	...	.	...	21	.	...	...	...	..	...	..
		Nyaungbinhle-Palanbin road to Mègintu cutch camp.	3	32	...	2	7	95	..	...	1	10	...	..	...	4	...	...	1	2	14	6	..
		Mègintu cutch camp to Tônshè cutch camp	4	12·6	...	...	10	22	...	...	6	...	...	...	...	4	...	...	5	7	41	13	...
		Tônshè cutch camp to Yebôk cutch camp.	5	13·2	1	4	28	70	...	...	1	1	...	...	...	23	...	...	13	17	26	29	...
	Kanni	Tônshè cutch camp to Nyaungbinhlè-Palanbin road.	6	20	...	.	4	27	...	1	...	2	...	...	...	12	...	...	...	.	3	1	...
		Nyaungbinhlè Palanbin road to Toyaw chaung.	7	13·2	3	...	6	40	...	.	...	2	..	...	...	14	...	...	2	20	7	6	..
		Keyat village to Kyaukkônma cutch camp.	8	50·4	...	...	14	105	...	.	1	23	...	...	...	27	...	..	5	8	12	1	...
		Kyaukkônma cutch camp to cutch camp on Nalwachaung.	9	40	...	...	9	40	...	...	1	23	...	...	..	5	...	...	...	1	...	1	..
		Nalwachaung to foot of the Mahudaung range.	10	36	5	15	34	78	...	..	1	10	...	...	...	58	...	...	18	21	22	20	...
		Total ...	...	338·6	19	57	171	562	...	3	18	99	...	.	...	180	...	...	54	100	130	90	..
		Average per acre ..	...	...	·05	·16	·50	1·66	...	.	·05	·29	...	..	...	·53	...	...	·15	·29	·38	·26	.
					2·38				·35											·83			
	North Yama	Gyat chaung to top of the Pôndaung range.	11	18·8	1	6	12	80	...	1	1	17	...	..	..	12	.	...	9	12	54	6	...
			12	34	67	103	97	123	...	.		...	...	45	...	..			2	3	..	...	...
			13	8·6	3	3	...	..	...	..	..	...	...	...	...	...	...	...	...	...	..	...	.
		Carried over ...	..	61·4	71	112	109	203	...	1	1	17	...	45	...	12	...	...	11	15	54	6	...

No attempt was made to classify teak stumps as full-sized and under-sized, but almost all the stumps are under-sized.

These forests have been very much over-worked in Burmese times. There is padauk, but it could not be counted.

Mr. T H. Aplin, Deputy Conservator of Forests.

Statement showing Summary of Valuation Surveys in the Eastern and Western Circles for the year 1892-93—continued.

Forest division.	District or forest tract.	Name of forest.	Locality of survey.	No. of survey entered on map.	Area of survey in acres.	Teak trees counted out.												Dead teak trees.	Cutch.				Padauk.	Name of officer by whom survey was made and remarks.*
						Sound green teak.				Unsound green teak.				Girdled teak.			Teak stumps.							
						I	II	III	IV	I	II	III	IV	Sound.	Unsound.	Under 6 feet girth.	Full-sized.	Under-sized.		Above 3 ft. girth.	Below 1 ft. 6 ins. or 3 ft. girth.	Below 1 ft. 6 ins. girth.	Stumps.		
1	2	3	4	5	6	7	8	9	10	12	12	13	14	15	16	17	17	18	19	20	21	22	23	24	25
Lower Chindwin—*concluded.*			Brought forward ...	...	61·4	71	112	109	203	...	1	1	17	...	45	...	12	...	...	11	15	54	6	...	
	Western Pagyi—*concluded.*	North Yama—*concluded.*	Thayetgaing cutch camp to foot of Mahdaung.	14	40	18	58	88	254	14	1	4	...		15		59		...	8	6	10	31	49	Girdled teak trees include dead teak trees and have not been classfied. In the last four countings only cutch was counted out.
			Thayetgaing cutch camp to Pyazwè village.	15	28	4	9	24	105	...	2	1	23		7		...		...	8	14	32	2	11	
			Aingma to Thayetgaing ...	16	58·8	3	8	48	105	...	2	4	7		20		30		...	34	21	66	13	9	
			Aingma to the Yama chaung *vid* Thabyegyi.	17	56	...	7	22	165	...	...	2	27		32		35		...	72	65	231	...	20	
			Thamadaw-ywa-zo to mouth of Aingma chaung.	18	77·6	...	...	...	...	...	...	...	...		...		...		...	34	23	16	...	...	Cutch only was counted.
			Mouth of Aingma chaung to Aingma village.	19	44·8	...	...	...	...	...	...	...	...		...		...		...	37	32	74	3	...	
			Aingma-Chinbyit road to Kywegyatu (Yama chaung).	20	48	...	...	...	...	...	...	...	...		...		...		...	11	39	124	...	...	
			Mouth of Natgyi-zè-chaung to Aingma-Chinbyit road.	21	26·8	...	...	...	...	...	...	...	...		...		...		...	11	20	55	...	...	
			Totals ...	...	441·2	96	194	291	732	14	6	12	74		119		136		...	226	235	662	53	89	Mr. T. H. Aplin, Deputy Conservator of Forests.
			Average per acre ...	...	...	·21	·44	·66	1·65	·03	·01	·02	·16		·27		·3		...	·51	·53	1·5	·12	·2	
						2·97				·24										2·51					
	Kalè ...	Lower Myittha ...	Due west of Indin village ...	1	80	...	...	...	...	...	...	...	...		...		...		...	27	31	...	...	...	Young growth very scare. Young growth fairly plentiful. Young growth poor. — Kyabin block; area of block 4,491 acres; 2·37 1st class trees per acre.
			Due west of Kyamin village for 2 miles and then due east 3 miles.	2	80	...	...	...	...	...	...	...	...		...		...		...	403	172	507	...	...	
			Due north of Taungtha as far as Sinywa and 1½ miles beyond	3	56	...	...	...	...	...	...	...	...		...		...		...	72	82	57	...	...	
			South east of Taungtha to river, then due west and then north.	4	70	...	...	...	...	...	...	...	...		...		...		...	445	210	517	...	...	Young growth plentiful.
			South-west of Natin across the river to east of Sihaung.	5	48	...	...	...	...	...	...	...	...		...		...		...	932	957	...	...	...	Young growth very numerous.
			From North Sihaung, parallel to Nankathi.	6	48	...	...	...	...	...	...	...	...		...		...		...	590	270	...	55	...	ditto.
			Due south-west of Sihaung and then north-west on east bank of Nankathi.	7	32	...	...	...	...	...	...	...	...		...		...		...	386	394	...	79	...	ditto — Nankathi block; area 7,036 acres, average 8·5 1st class trees per acre.
			Branch surveys east and south-east of East Sihaung.	8	16	...	...	...	...	...	...	...	...		...		...		...	201	183	...	34	...	ditto
			West of Koko, then south, then east, then north-east, back to Koko.	9	80	...	...	...	...	...	...	...	...		...		...		...	250	65	35	33	...	Young growth very poor.
			West of Koko, then along west bank of Myittha as far as Nwa.	10	52	...	...	...	...	...	...	...	...		...		...		...	140	145	...	...	...	ditto.

Mingin.	Kale township.	Nwa	North-west, then west, and then south of Koko village.	11	23	...	...	...	...	...	...	...	...	.....	...	...	100	37	8	24	Young growth very scare.	Koko block; area 5,000 acres; average 31st class trees per acre.
			From Koko, south-east, up to Zigôn and then along north bank of Nwachaung.	12	64	...	...	...	...	...	...	...	...	.....	...	..	230	280	304	2	Young growth plentiful in taungyas.	
			From Zigôn along south-east bank of Nwachaung.	13	32	...	...	...	...	...	...	...	...	.....	...	...	103	127	206	7	ditto.	
			From point where road from Koko to Nwachaung meet the chaung and then along latter to second camp on Nwachaung.	14	90	..	...	...	...	...	...	..	...	.....	...	..	245	250	222	22	Young growth very plentiful in patches.	
			From second camp on Nwachaung to Nwataung.	15	32	...	..	...	...	...	...	...	...	.....	...	...	37	25	39	.	ditto ...	
			Total ..	..	803	...	...	...	...	...	..	...	..	.....	...	..	4,161	3,228	1,893	256	...	Mr. H. N. Thompson, Assistant Conservator of Forests.
			Average per acre ...	...	...	...	...	...	...	...	...	...	...	.....		...	5·18	4·01	2·35	·31		
																	11·87					
			North of first camp on the Indaung plateau and parallel to the latter.	1	64	31	29	20	52	15	9	7	...	6	9	..	...	.	...	.	...	Countings made in the teak forest inside the proposed Nwa reserve. (*See* map of proposed Nwa reserve.)
			South of first camp on the Indaung plateau and parallell to the latter.	2	64	41	32	24	49	13	2	2	...	4	3	...	...	...	...	...	...	
			Due east of second camp on Nwa chaung on to the Main Yoma.	3	42	39	43	40	35	11	7	7	...	5	3	...	...		..	...	...	
			North-west and then north of second camp on Nwa chaung on to the Indaung.	4	64	52	37	32	24	9	3	...	...	11	7	..	...	...	...	...	...	
			Total ..	...	234	163	141	116	160	48	31	16	...	26	22	...	...	...	...	..	...	Mr. H. N. Thompson, Assistant Conservator of Forests.
			Average per acre ...	...	.	·7	·6	·5	·68	·2	·09	·06	...	·11	·09	...	..	..	..	...	...	
						2·47				·36												
	Balet township.	Mahamyaing	North-east of Thabyegan ...	1	80	17	13	35	43	26	3	9	...	28	39	...	...	...	...	...	...	Countings made in the Mahamyaing teak forest. (*See* map of Mahamyaing for position of valuation surveys.)
			West and then north-west of Thabyegan.	2	64	13	16	20	60	33	36	16	...	10	30	...	..	..	...	...	...	
			South of Thabyegan for 2 miles, then north-east for 4 miles.	3	80	10	4	10	.	20	14	4	...	6	14	...	..	...	...	...	...	
			North of Thabyegan for 3 miles, then east for 1 mile.	4	64	14	2	14	27	27	9	2	...	12	20	...	...	...	...	...	...	
			South-east of Khôngan ...	5	64	20	10	13	44	41	9	3	...	9	12	...	...	...	...	...	...	
			West of Peikhmwègan ...	6	64	35	17	16	33	20	13	9	...	6	9	...	. .	...	...	...	...	
			North then north-west of Peikhmwègan.	7	64	3	1	7	29	17	3	9	...	6	11	...	...	...	..	...	.	
			North-east of Peikhmwègan	8	64	40	40	38	91	·60	20	7	...	2	1	...	...	...	...	...	...	
			South-east of Peikhmwègan	9	64	53	47	43	107	68	23	9	...	16	23	...	...	...	...	..	...	
			Total ...	..	608	205	150	196	433	312	130	68	...	95	159	...	...	...	...	...		Mr. H. N. Thompson, Assistant Conservator of Forests.
			Average per acre ...	...	...	·33	·24	·32	·71	·51	·21	·11	..	·15	·26	...	...	...	..	...	..	
						1·61				·83												

Statement showing Summary of Valuation Surveys in the Eastern and Western Circles for the year 1892-93—concluded.

Forest division.	District or forest tract.	Name of forest.	Locality of survey.	No. of survey entered on map.	Area of survey in acres.	Teak trees counted out.													Dead teak trees.	Catch.				Padauk.	Name of officer by whom survey was made and remarks.
						Sound green teak.				Unsound green teak.				Girdled teak.			Teak stumps.			Above 3 ft. girth.	Below 1 ft. 6 ins. to 3 ft. girth.	Below 1 ft. 6 ins. girth.	Stumps.		
						I	III	III	IV	I	II	III	IV	Sound.	Unsound.	Under 6 feet girth.	Full-sized.	Under-sized.							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Mlabu.	Nwamadaung	Nwamadaung ...	Thanat stream ...	...	62	...	...	...	...	...	...	...	...	...	...	...	...	...	69	128	186	401	310	...	
				...	8	...	...	...	...	...	...	...	...	...	...	...	...	...	9	5	16	43	66	...	
	Sagu	Aingma	Man stream ...	...	9·5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	53	279	820	19	...	
				...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14	...	2	...	...	
		Natsin ...	Natsin stream	...	18	...	...		...	...	...	...	...	...	...	...	...	...	...	...	...	6	273	...	
			Total ...	...	101·5	..	...	...	...	...	..	...	...	...	...	...	...	...	78	200	481	1,272	668	...	
			Average per acre ...	.	...	...	...	...	...	...	...	...	...	...	...	...		.	·77	1·97	4·73	12·53	6·58	...	
																				25·8					
	Môn West ..	Môn West ..	Zi and Singnan stream	.	17	...	7	101	212	...	...	...	..	...	...	...	106	...	...	...	..	...	...	..	Mr. C. W. Palmer, Deputy Conservator of Forests.
				..	34	4	4	10	...	...	...	...	...	31	...	..	1	...	...	...	...	...	...	...	
			Zawa stream	..	28·5	...	2	2	39	...	...	...	...	19	...	...	38	...	...	...	...	...	...	...	
			Zinbyun and Kyauka stream	...	52	7	14	80	...	...	...	...	...	32	.	...	20	...	...	1	7	11	32	...	
			Kyauka and Tamyit stream...	...	48	4	7	49	...	...	...	...	...	10	...	...	21	...	...	. .	...	...	..	...	
			Near Kyaukpyu village ...	...	43	...	...	...	...	...	...	...	..	...	...	...	...	...	26	...	17	226	96	...	
			Kawmu stream	...	7	...	..	...	...	...	...	...	...	..	...	...	...	...	...	...	12	124	121	...	
			Kawmu stream and Matein village.	...	19	...	...	...	...	...	...	.	...	...	...	...	...	..	...	...	4	4	18	...	
			Phlaung stream		49	...	.	...	...	...	...	...	...	...	...	...	...	...	..	1	10	112	95	...	
				...	13	...	...	3	15	...	...	...	...	22	.	..	11	...	...	.	.	...	...	...	
			Total ...	...	308·5	15	34	245	266	...	...	...	...	114	...	...	197	...	26	2	50	477	352	...	
			Average per acre ..	...	...	·04	·11	·79	·86	.	...	...	...	·36	...	..	·63	—	·08	...	·16	1·54	1·17	...	
						1·81														2·88					

Minbu.	Natmauk ...	Natmauk ...	North-west of Lebu	...	..	48		...	..	...	...	...	..	...	.	.	...	..	..	210	..	198	...	Mr Burn-Murdoch, Assistant Conservator of Forests.
			North-west of Sely	...	...	32	..	.		...	.	..	...	...	A.		.	..	...	18	25	836		
			South of Seli ...	..	..	32	...	.	...	...	...	...	..	...	.	...	.	...	...	16	7	529	...	
			North-west of Lebu south of stream	...		40	..	.	...	...	..	...	..	...		...	...	...		237	...	506	..	
			South-east of Thomôngôn	...	...	48	...	...	...	...	..	...	...	...	.	...	..	...	...	102	20	629	...	
			Thomôngôn South	..	...	48	..	..	...	...	.	..	.	...	...	..	...	...	..	34	20	321	...	
			South-east of Kalashin	...		52	...	...	...	...	...	...	...	...	...	...	...	...	...	91	22	571	...	
			North-west of Kalashin	...	.	60	...	..	..	..	..	...	...	...	..	..	...	...		104	10	334	...	
			West of Kalashin	..	...	48	...	...	...	..	.	...	..	.	..	...	...		.	89	8	348	...	
			South-west of Kalashin	.	...	48			..			...			...			.	...	...	225	9	246	.	
			Total	..	..	456	...	...	...	...	...	...	..	.		...	...		...	...	1,126	121	4,518	...	
			Average per acre		...	...	..	...	..	...	.	...	...	...	...	..	...	..			2·46	·26	9 9	...	
																						10·17		
	Pin ...	Pin ...	South-east of Kyaukkaw	...	.	32	...	..		...	.	...	...		.	...	...	...	...	...	.	395	...	
			North-east of Kyaukkaw	...	...	40	...	..	...	...	...		...	...	..	...	...	..	...	...	98	375	.	
			North-east of Tigyaung	...	...	48	..	...	...	...	...	...	...	...	...	...	...	...	...	71	17	876	...	
			East of Tigyaung	...		64	...	.	...	...	..		...	...	...	.	..	...	...	...	13	349	...	
			South-east of Myinbègyi	...	..	37	...	..	...	...	...	...	...	...	...	.	.	...	...	...	7	208	...	
			Myinbègyi to Thittagyin	...	..	112	...	...	...	...	...	...	...	...	...	...	...	...	.	33	8	1,057		
			North-east and north-west of Thittagyin	...		96	...	...		...	.	.	...	...	.	...	...	...	...	24	12	1,542	..	
			Dandalônbin ...	...	..	48	..	...	...	...	...	..	..	...	...	...	...	...	...	38	5	309	...	
			Thahnôngôn, north-west	..	...	48	...	...	...	...	.	..	..	...	...	.	...	..	...	178	34	431	...	
			Total	..	...	525	...	...	.	...	...	...	...	...	..	...	...	..	.	344	114	5,542	..	
			Average per acre	...	...	...	..	...		.	...		...	...	..	...	.	..	...	·65	·22	10 55	.	
																						10·77		

APPENDIX D.

Statement showing Teak Trees Girdled during the Season, 1892-93.

Division	Girdling officer	Revising officer.	Range	Forest district	Locality	Number of teak trees	Remarks.
1	2	3	4	5	6	7	8
			EASTERN CIRCLE.				
Katha			Shwell	Ruby Mines	Along a tract 300 feet wide along the Railway line to Mogaung	256	
					In the Nammè, Kunchaung, and Maingtha forests partially killed trees belonging to Maung Bauk	185	
Mandalay	Mr H Calthrop, Deputy Conservator of Forests	Mr H Calthrop, Deputy Conservator of Forests.	Mèhông river	Northern Shan States	Nyaungbin chaung ...	96	
Mu	Mr J C. Murray, Deputy Conservator of Forests.	Mr J. C Murray, Deputy Conservator of Forests	Pinlèbu	Katha	Nabè forest, at the sources of the Pônkyauk chaung.	135	
					Nabè forests, at the sources of the Kaing chaung	16	
					Nabè forests, at the sources of the Kwepyauk chaung	32	
					Tinwa forests, in the Manyauk chaung valley	296	
					Old girdled trees marked for the Bombay Burma Trading Corporation in the Nabe forest.	66	
					Old girdled trees marked for the Bombay Burma Trading Corporation in the Tinwa forest	44	
Pyinmana.		.....	Yeni ...	Pyinmana	Partially killed old girdled trees regirdled in the Yeni forest	316	
Southern Shan States	....	Mr H Jackson, Deputy Conservator of Forests	Möngpan	Southern Shan States	East of the Salween, Mèsala chaung	68	
					West of the Salween near Namtaung	315	
					TOTAL EASTERN CIRCLE	1,825	
			WESTERN CIRCLE				
Upper Chindwin	Mr C W A Bruce, Assistant Conservator of Forests	Mr C W A Bruce, Assistant Conservator of Forests		Upper Chindwin	Nankadin: Nanthami ..	568	
					Nantakin	771	
					Nantachein .	83	
					Nantahôn	356	
					Namlin ..	535	
				Katha	Nankadin: Dathwègyauk	189	
					Nansput	34	
					Lintan .	14	
					Ye-e	9	
					Tompkin	11	
					Kyundônlè	43	
					Nantakôn	17	
					Total	2,630	
				Upper Chindwin	Nantainkwin: Nantainbwin .	455	
					Nantainkwin	932	
					Chawbôn	32	
					Aingyilin ..	391	
					Panzit .	280	
					Pônle	244	
					Nantainkwin .		
					Below Dalè ..	36	
					Total	2,370	
				Katha	Nankamu .. Namun	149	
					Kantigalaè .	294	
					Kantigyi .	407	
					Total	850	
	Mr. H H Forteath, Assistant Conservator of Forests	Mr H H Forteath, Assistant Conservator of Forests	..	Upper Chindwin	Chaungyi: Nankut .	253	
					Nankwin .	360	
					Hwèpakun ...	76	
					Nanpalu	361	
					Nansi ..	1,228	
				Katha	Chaungyi .. Nansan .	479	
					Modè	964	
					Nantè ..	813	
					Nampe .	350	
					Nammiva	273	
					Name	427	
					Hwèkatkyè ...	35	
					Nantalan ...	1,067	
					Namu ..	633	
					Mawbôn	165	
					Nansaratè	100	
					Kyein	98	
					Nankan	319	
					Nansaung	357	
					Nankwekwun	469	
					Nansaka	300	
					Total	9,121	
Yaw	Mr C. L Toussaint, Deputy Conservator of Forests	Mr C L Toussaint, Deputy Conservator of Forests		Pakôkku .	Kyi-chaung: Kyaing chaung .	301	
					Dandin chaung	154	
					Total ..	455	
					TOTAL WESTERN CIRCLE .	15,426	
					GRAND TOTAL UPPER BURMA ..	17,251	

Remarks by H. THIRKELL WHITE, Esq., Commissioner of the Northern Division, on the Bhamo Forest Report, dated the 26th August 1893.

PROPOSALS for the reservation of areas to be known as the Mosik and Nansônti reserves have been submitted and gazetted. The proceedings in connection with the reservation of the three proposed reserves, namely, the Uya-Hatha, Hmangin, and Nampa, settled during the year will be forwarded to the Conservator for submission to the local Government in a few days.

The Forest Settlement Officer's proceedings connected with the proposed Mohnyin reserve have been submitted.

For the present and for some time to come it will be necessary to enforce the Forest Regulation and Rules in the Bhamo district with much tact and leniency. It is impossible to treat this district as if it were an ordinary settled district. The fact that Burmese authority in the Kachin hills was limited must be recognised. It will not do to unduly harass the people by a strict enforcement of the law till they have become accustomed to our methods and can be made to have some dim apprehension of the grounds on which our rules are based.

The Deputy Commissioner and the Deputy Conservator of Forests are no doubt alive to these considerations.

The Deputy Commissioner has not remarked on the relations between the Officers of the Forest Department and the people, a point of considerable importance which might well be noticed in the Forest Report and which might also with advantage be made the subject of comment by the Deputy Commissioner.

Extract from the Annual Report of Bhamo Division for 1892-93.

* * * *

26. The number of undetected cases, class C, may be considered rather large, but I would point out that it includes cases of illicit girdling in past years and reported only now, also cases where the offenders are Kachins and in which it was not thought worthwhile to make further investigation, but sufficient to have explained the law.

Remarks by E. C. S. GEORGE, Esq., Deputy Commissioner, Bhamo, on Bhamo Division's Report.

So far as the Kaukkwe valley is concerned the Kachins should by now pretty well know that we do not wish teak girdled and if caught they will be adequately punished. To the east of the Irrawaddy we have not got quite such a good hold and in many cases it is more politic to let off offenders with a warning; for some parts of the Sinkan valley teak of a meagre kind of course is reported to grow very thickly, and it is hard for the Kachins to be able to get a taungya site in which some few teak trees are not included.

Endorsement by H. THIRKELL WHITE, Esq., Commissioner of the Northern Division,—No. 520-18, dated the 19th September 1893, on the Katha Report.

COPY forwarded. An interesting, if perhaps somewhat too voluminous, report.

Good work seems to have been done during the year in the settlement of reserves and the preparation of proposals for reservation.

The financial results of the year were exceptionally good.

It is clear that the division is much too large to be properly supervised by one Deputy Conservator. The staff also requires strengthening.

Extracts from the Annual Report of Katha Division for the year 1892-93

IN the Ruby Mines reserves no systematic protection was attempted, though the necessity for this protection is very great as the constant fires that yearly overrun the reserve are gradually eating into the forest and denuding the hill sides which become covered with a long rank kind of grass that acts as so much tinder. An attempt was made to induce the villagers near the reserve to help to keep out the fires by offering a rewarded of R. 100 if no fires broke out or if started were put out. This had, however, no effect.

Remarks by Deputy Commissioners, Katha and Mogôk, on Katha Divisional Report.

I ATTACH great importance to the proper fire-protection of the fuel reserves. Fuel has now gone up to Rs. 10 a ton. The demand for fuel will increase year by year.

I think something might be done in this way if it were set about in an intelligent manner.

A second ranger is necessary in the upper Shweli; a forester is needed at Möngmit to look after cutch, and a considerably larger establishment is absolutely necessary for the Ruby Mines reserves if we intend to manage them at all. The lack of establishment in these forests has been simply disastrous. And the forests must be looked after better if we intend to save any of them from periodical fires that devastate them and control the revenue that we expect to receive to pay for such protection.

* * * *

The Katha division as it stands at present is too large for supervision to be properly exercised by one Divisional Officer.

I feel sure that the additional revenue obtained would suffice to pay for the increased establishment required.

N. G. CHOLMELEY,
Deputy Commissioner, Mogôk.

The Division is undoubtedly too large for one Divisional Officer.

G. CARMICHAEL,
Deputy Commissioner, Katha.

Far too large.

N. G. CHOLMELEY,
Deputy Commissioner, Mogôk

Endorsement by H. THIRKELL WHITE, Esq., Commissioner of the Northern Division,—No. 274-18M., dated the 11th September 1893.

COPY of the following (with copy of Deputy Commissioner's letter) forwarded to the Conservator of Forests, Eastern Circle, Mandalay, for information. The report has been sent on to Deputy Commissioner, Sagaing.

Remarks by H. THIRKELL WHITE, Esq., Commissioner of the Northern Division, on Annual Report of the Mandalay Forest Division, dated the 11th September 1893.

THE forms referred to in the body of the report not being attached it is not easy to to understand all the Assistant Conservator's observations.

For the most part the report deals with matters unconnected with this division. I think some attempt should be made to examine the cutch-bearing areas in the Mandalay district with a view to their reservation, if necessary. I quite agree that all possible steps should be taken to preserve a continuous supply of cutch. I am aware of the inconvenience which has arisen elsewhere on account of the exhaustion of this valuable product.

The account of the experimental cultivation at Maymyo is of much interest. While not entirely understanding, and while so far as I understand them not endorsing, the remarks of the Forest Officer about the people from which the present establishment is drawn, I think that it is no doubt desirable to have some efficient supervision over the experiments at Maymyo which should be of great value.

From K. G. BURNE, Esq., Deputy Commissioner, Mandalay, to the Commissioner of the Northern Division,—No. 2102-5F., dated the 5th September 1893.

I HAVE the honour to forward the annual progress report of the Mandalay Forest Division for the year 1892-93.

The report was received late this year, that is, on the 18th of August, and owing to other work I have not been able to forward it before. The delay in reaching this office has been due to change in officers, Mr. Calthrop, the Deputy Conservator, having been transferred after the close of the official year, and his place being taken by the Assistant Conservator Mr. Dun from Bhamo.

The report deals but slightly with the Mandalay district. The Madaya forests, owing to a paucity of officers, remain out of proper control and no information is given regarding their extent or value.

There was an increase in forest prosecutions, and this was marked in the Pyinulwin subdivision, where the present Subdivisional Officer, Mr. Adams, and the police did good work in dealing with forest offences.

It is a pity I think that the Mandalay district cannot receive at present closer attention on the part of the Forest Department. The range of hills forming the eastern boundary might with advantage be inspected.

The object of most interest in forest work in this district is the experimental cultivation carried on there in fruits and vegetables and arboriculture.

It is too early to write with confidence with respect to the prospects for fruit cultivation. From the experiments tried there seems reason to hope for success, but unless there is a resident Forest Officer to thoroughly superintend the plantation the hope may not be realized, and I quite agree in Mr. Dun's remarks in paragraph 45. I may remark that there are indigenous fruit here closely allied to the English peach and damson. Mr. Adams, the Subdivisional Officer, has succeeded in having excellent jam made from such fruit.

Pine trees planted in Maymyo belonging to the *P. Khasia* have done well. The planting of *eucalypti* has been carried out to a large extent, but it is yet too early to say what effect upon the climate here these trees produce.

I understand they are valuable in absorbing the exhalations that give rise to malaria.

I find that as regards vegetables the experiments in that direction have not come within Forest Administration The cultivation of the potato has been carried on in the subdivision to a small extent, sufficient to show that the potato for the market might be cultivated on a large scale in the Pyinulwin township.

The potatoes produced are not at present such as would perhaps find a ready sale amongst potato consumers as they are wanting in mealiness, but no doubt this is a fault arising from a proper knowledge of how to cultivate them and not of soil or climate. Maymyo deserves, I think, greater attention than it has hitherto received in respect to experiments in vegetables, tea, coffee, and arboriculture.

Extracts from the Annual Report of the Mandalay Division for 1892-93.

Paragraph 28. * * * With regard to offences committed in cutting and boiling cutch without a license in the Meiktila district, I have to remark that the action of the lower courts in which the cases were tried is extremely discouraging to the Forest Officers concerned. Small fines such as Rs. 5 and Rs 10 with the confiscation of produce and common utensils cannot be expected to act as a deterrent but rather the reverse, for what Burman, in whom the gambling instinct is strong, would pay Rs. 60 for the privilege of boiling cutch for 6 months only, when he has the chance of doing so for an indefinite period by taking proper precautions and only the risk of having to pay Rs. 10 at the end.

Paragraph 66.—Owing to constant complaints made by Messrs. Darwood against local traders in the Meiktila district stealing their timber * * * * the Hlaingdet forest, in which Messrs. Darwood work, have with the previous sanction of the Deputy Commissioner, Meiktila district, been closed to local traders.

Remarks by Commissioner and Deputy Commissioner.

As a rule the prosecution only proves that one or two stumps out of a large cutch camp have been taken from land at the disposal of Government.

H. ADAMSON,
Deputy Commissioner, Meiktila.

I have called the attention of the Deputy Commissioner to the smallness of the fines inflicted and suggested that these cases should be tried by Subdivisional Magistrates and if offences continue that carts and bullocks used in committing offences should be confiscated.

J. E. BRIDGES,
Commissioner, Eastern Division

The Deputy Commissioner's sanction extended only to closing the forest to trade licenses for extraction of teak

H. ADAMSON,
Deputy Commissioner, Meiktila.

Extract from the Annual Report of Mu Division for the year 1892-93.

Paragraph 3.—No area could be selected as a cutch reserve, unless old deserted fields could be taken up. In localities in which cutch trees are found growing near cultivation, if the fields are deserted for any number of years, a cutch forest is the sure result. Such areas are now being claimed as bobabaing, especially in the Shwebo district, and the people are cutting the trees and cooking cutch without license.

Remarks by Commissioner and Deputy Commissioners

This seems to be wrong. If the lands have been deserted long enough for cutch forests to be growing on them I should think they have in all probability become State.

C. H. E. ADAMSON,
Commissioner, Central Division.

All the cases brought to my notice were enquired into and the land found to be bobabaing.

G. W. SHAW,
Deputy Commissioner, Shwebo.

Paragraph 35.—Arrangements were made as explained in last year's report with the Bombay Burma Company thitgaungs to work out Wuntho timber; they were to be paid Rs. 2 per ton for all marked logs delivered below the rocks.

A considerable amount of confiscated timber is lying in inland villages in Mansi. If it cannot be worked out I would suggest that the people be allowed to use it.

G. CARMICHAEL,
Deputy Commissioner, Katha.

Paragraph 45. * * * I received applications from people in the Shwebo district for licenses for 43 cauldrons, as the sanctioned number of licenses had already been issued, I referred the matter to the Conservator for orders. Before an answer could be received from him, the men started cooking without licenses, having claimed the land as bobabaing. Cutch-cooking without licenses is now being carried on in the Kambalu and Shwebo subdivisions of the Shwebo district, and in parts of Sagaing district.

The trees are I think mostly very small, and anything is cut whatever the size.

G. W. SHAW,
Deputy Commissioner, Shwebo.

Paragraph 46.—Does the fact of the land being bobabaing give the people the right to cut the trees on the land?

When the Wuntho Sawbwa claimed the teak trees within his territory, it was decided that the trees and forests belonged to Government.

Definite orders on this point are required. I should say that when a man plants cutch on the bunds of his paddy-fields, he is entitled to cut them down and treat them as he likes, but that when he has relinquished his land and allowed it to return to a state of nature that the land should not be considered bobabaing, and that the trees at any rate should belong to the State.

C. H. E. ADAMSON,
Commissioner, Central Division.

Apparently: *vide* section 32 (2) (*a*), Forest Regulation, bobabaing land is not at the disposal of Government.

Teak is on a different footing, see section 32 (1).

G. W. SHAW,
Deputy Commissioner, Shwebo.

Paragraph 48.—From what I saw of the forests round cutch-cooking camps it seems certain that all cutch trees 3 feet and above in girth will be cut within a certain radius of the cutch camp, notwithstanding all the care that may be taken in issuing licenses. If fewer licenses are issued than applied for, the timber is more wastefully used, consequently more trees are cut per cauldron than would be the case were more licenses issued.

I think a special report on this subject of cutch in this Forest division should be submitted. I should like to know what cutch there is, and what steps, if any, can be taken to maintain the supply.

H. T. WHITE,
Commissioner, Northern Division.

This is worthy of notice.

C. H. E. ADAMSON,
Commissioner, Central Division.

Paragraph 49.—As cutch is being allowed to be cooked on bobabaing land without licenses, the extracts of *than* and other barks can be cooked without hinderance, so that it is possible that cutch will be very greatly adulterated.

Is the cutch on bobabaing land so plentiful as to make an appreciable difference?

G. W. SHAW,
Deputy Commissioner, Shwebo.

No doubt this is true.

C. H. E. ADAMSON,
Commissioner, Central Division.

Endorsement by J. E. BRIDGES, Esq., Commissioner of the Eastern Division,—No. 2162F., dated the 30th August 1893, on the Pyinmana Forest Division

FOREST Report of the Pyinmana Division forwarded to the Conservator of Forests, Eastern Circle, Mandalay.

During the year there has been a great deal of correspondence regarding cutch. An order was passed by me on a petition of a villager to cut cutch on his own land, that licenses to cut cutch were only necessary in the case of land at the disposal of Government, and cultivators were therefore at liberty to cut cutch on their ancestral land. In many

cases villagers are said to have cut cutch on land which belonged to Government and in the present report the Deputy Conservator of Forests remarks that cases in which 195 men were accused of illicit cutch manufacture were reported to the Deputy Commissioner, Yamèthin, in February, but no further steps were taken. These cases were never taken before a court, as the Assistant Conservator of Forests was satisfied with stating that these men cut cutch on Government land and then gave a long list of their names and witnesses and asked that they should be prosecuted. It is not the duty of District Officers to prosecute forest offences, and the Forest Officers should themselves bring cases into court producing witnesses that the land on which cutch has been cut is Government land and showing the amount of cutch which has been cut. If they will carry out their own duties, they will no doubt find that their cases have more satisfactory results.

The cutch question will undoubtedly cause a great deal of discontent if numerous prosecutions are instituted, and it would be much better to settle it by declaring all cutch trees to be the property of Government or by making cutch reserves and allowing people to cut cutch freely elsewhere. I would recommend the latter alternative, as it would not affect the former rights of the people and would enable the Forest Department to make provision for the supply of cutch and exercise due supervision over the reserved areas instead of attempting the almost impossible task of supervising the two large districts of Yamèthin and Meiktila without an adequate staff.

Note on the above by J. W. OLIVER, Esq., Conservator of Forests, Eastern Circle.

To prevent undue harshness in the working of the Forest Rules and in order to give effect to Chief Commissioner's Resolution, Forest Department, No. 3E., dated 7th February 1890, officers have been generally instructed to report cases to the Deputy Commissioner or other Magistrate for orders before proceeding further in the matter. The 195 cases referred to were reported by the Forest Officer in pursuance of these instructions, and as no orders were received he presumed that the Deputy Commissioner did not consider it advisable to have the men prosecuted. In the letter reporting the first batch of these cases the Forest Officer specially asked for the Deputy Commissioner's advice as to further procedure. This letter seems to have been overlooked.

From Colonel T. M. JENKINS, Deputy Commissioner, Yamèthin, to the Commissioner of the Eastern Division,—No. 181, dated the 23rd August 1893.

I HAVE the honour to forward the Annual Forest Report of the Pyinmana Division with the following remarks.

In Chapter VII, Forest offences, at page 11*a*, the Deputy Conservator refers to the 195 men who were accused of illicit cutch manufacture and who were reported to the Deputy Commissioner in February last, are the same as mentioned by me in my letter No. 234, Judicial Department, dated the 23rd August 1893, where I pointed out that the information given was so vague that I was unable to act on it.

As there seems to be some difficulty in checking the cutch boiling in this district, I beg to suggest that no cutch is to be cooked without a license; but licenses to cook cutch on bobabaing land might be granted free; and that each application should show the limits within which the cutch is to be cut, and the thugyi of the village to certify that the land within the limits is applicant's bobabaing land.

Remarks by L. H. SAUNDERS, Esq., Deputy Commissioner, on Pyinmana Division's Report for 1892-93.

THE Forest Staff is I think undermanned. It is impossible to get men in this district to work at the rates of pay which the lower grades receive.

The number of persons brought up for taungya cutting is I think excessive. The Forest Act is unpopular in the district and at present I think it would be sufficient to punish only in the very serious cases.

Remarks by Superintendent and Political Officer, Southern Shan States, on Annual Report of Deputy Conservator of Forests, Southern Shan States, for the year 1892-93.

Superintendent's remarks.

HE has been called on for explanation. Not yet received.

Deputy Conservator's report.

THE only serious infraction of the law during the year under report has been the girdling by the Sawbwa of Möngnai of 450 small teak trees on the west bank of the Namteng. This case has already been reported, but orders have not yet been received.

I endorse this forecast.

For the last three seasons I have had to work single-handed. It is impossible for one man to inspect properly and to superintend the work over such a large area, and a large part of the year is wasted in travelling. If much girdling is to be done, a small staff of subordinates will be required, and these men will at the same time be able to look out for and report breaches of the forest law, and to exercise a general supervision over work in the forests.

REMARKS BY CIVIL OFFICERS.

Report of the Upper Chindwin Forest Division.

From W. N. PORTER, Esq., Deputy Commissioner, Upper Chindwin, to the Conservator of Forests, Western Circle, Upper Burma,—No. 887-16, dated the 10th August 1893.

I HAVE the honour to forward herewith the Forest Administration Report for the year 1892-93. Mr. Bruce has fully dealt with the subject and I have no further remarks to offer.

Letter No. 980, dated the 17th October 1893, from Major C. H. E. ADAMSON, C.I.E., Commissioner, Central Division, to the Conservator of Forests, Western Circle, Upper Burma.

IN compliance with the request contained in your letter No. 1651-48A., dated the 3rd October 1893, I have the honour to return herewith the Annual Report of the Upper Chindwin Forest division for 1892-93 with my remarks thereon.

Extracts from Upper Chindwin Divisional Report with Commissioner's marginal remarks.

* * * * *

The Nampanan is a forest of pure teak on flat ground, the undergrowth being kaing grass; this has a width of about two miles and then gives way to sloping ground covered with engdaing. The teak on this baffles description, trees of all ages being well represented, every tree being tall, straight, and well grown, the only drawback being the stream itself which, owing to its small size and winding nature, makes extraction by floating impossible.

It is pleasing to hear of such a fine forest. It will be a reserve when teak rises in price sufficiently to pay for the increased cost of transport.—C. H. E. A.

* * * * *

As regards Chaungyi, Mr. Forteath was in hopes of seeing the Deputy Commissioner, Katha, at Mansi personally on the subject (of green teak found girdled in yas), but the Deputy Commissioner did not arrive when he was expected, and I am afraid little can be done without his help to protect the teak. As regards the Nankamu the Divisional Officer and Mr. Forteath both explained to all villagers that green teak must not be destroyed and no yas must be cut in teak localities without leave; but here the forests will soon be past all help and simply become a mass of evergreen jungle unless something is done at once. If the Deputy Commissioner, Katha, would issue a letter to all village headmen on the subject, the Nankamu forest may yet be saved.

This is in the Northern division and should be brought to the attention of the Commissioner, Northern Division.—C. H. E. A.

The Nankamu reserve would naturally fall into the Upper Chindwin civil district. It is too remote from Katha to be properly looked after by that district. I am in communication with the Deputy Commissioner, Upper Chindwin, with regard to having it transferred to that district.—C. H. E. A.

* * * * *

At the time the Upper Chindwin division was formed the Kampat reserve was the only one finally notified; since then the Kindat and Ahlaw reserves have been finally notified, but the Yu is still in the hands of the local Government.

It appears that some of the papers regarding the Yu forest have been lost.—C. H. E. A.

* * * * *

During Mr. Bruce's tour through the Yu and Ahlaw reserves the girdling of 1888 which was done by the Bombay Burma Corporation was passed through; this is a most heartrending sight; every marketable tree has been girdled whether in a group or a single tree; as long as the tree was sound it was girdled. None of this has been ex-

This appears to be very serious, but I am not aware what are the regulations under which the Bombay Burma Corporation were allowed to girdle in 1888.—C. H. E. A.

tracted yet. The amount of *aulé* and *nathat* here is very large, and the sooner the Bombay Burma Corporation commence operations here the better, as owing to the dryness of the forests west of the Chindwin fires are very frequent, and every year much of the *aulé* and *nathat* must get burnt up.

* * * * *

The cases of the Chaungyi, Nantainkwin, and Naukadin have already been mentioned and there is very little reason to doubt that all the other forests (in the northernmost parts of the division) are in much the same way as regards the protection afforded green teak by the British Government. The rules are splendid in theory, but unless the Revenue officials help the Forest Department, the officers of the latter, owing to the vastness of the area of this division, can do little. The number of cases tried in court and the smallness of the sums taken in compensation in cases which were compounded, when it is remembered that in no other division would cases of green teak felling have been compounded at all, shows that the Forest Department has not been savagely protecting its interests. But as the Deputy Commissioner, Kindat, has already issued a strong order on this subject, and if the Deputy Commissioner, Katha, does the same, a great improvement in this matter may be looked for during this year.

This is the first I have heard regarding the destruction of green teak. I shall be very glad to give any particular instructions to the Deputy Commissioner that may be suggested by the Conservator. At the same time I must say that the Revenue Officers have many other matters to attend to and that they must depend on the Forest Officers principally for information with regard to infractions of the rules.—C. H. E. A.

* * * * *

A suggestion is I understand before the Government of India to abolish procedure by which forest offences are compounded at the discretion of the Divisional Officer.

This in the case of this Forest division would be a great mistake, as it would not allow of any difference being made between a stupid Chin or Ganan who cuts green teak more from ignorance than vice * and a Shan who knows perfectly well that he is doing wrong. Besides it is very hard to hail a man off to a court some 80 or 100 miles distant for some offence in which he gets fined under Rs. 10 perhaps.

* Rather a strong word to apply. I do not think that trees are cut with any vicious intent as a rule, but simply because it suits a man to ignore rules.—C. H. E. A.

On the whole I think that Subdivisional Forest Officers should be allowed to compound certain classes of cases under proper supervision.—C. H. E. A.

* * * * *

The great danger lies along the roads. By clearing the undergrowth along the roads not only would the safety of the forest be partly insured, but the roads would be kept open and they would not be liable to constant change as is the case at present.—C. H. E. A.

If spaces were cleared at halting places near water and cheap *zayats* made, fire would be more likely to be kept out of the reserves than if much money was spent in cleared firelines and other elaborate precautions.

* * * * *

There is little doubt that the evergreen jungle is spreading everywhere; if it could only be burnt the problem of keeping it within bounds would be solved, but most probably it would be impossible to create an evergreen jungle fire on a large scale.

I cannot understand this. Why should evergreen jungle be spreading more than during the previous centuries.—C. H. E. A.

* * * * *

Experiments with * * sub-tropical fruit trees would be, if successful, very beneficial to the district, and would most probably be crowned with success as the climate is nearly identical with that of Assam, where all such fruits thrive. The cost after the initial cost of plants, laying out, soil, &c., should not come to more than Rs. 32 per mensem.

Per acre or per hundred acres?—C. H. E. A.

* * * * *

And yet there seems to be stagnation in the building of works of public utility in spite of the briskness of demand for (free) licenses. If the (free) licenses were to lapse and teak cut under them become the property of Government at six months from date of issue unless some *bonâ fide* start had been made by the petitioner in his work of public utility, then a great check would be put on the indiscriminate felling of standing dead teak.

This is a most sensible suggestion. I approve altogether of the *proper* use of free licenses and I think some such rule as this would put a stop to *improper* use being made of them.—C. H. E. A.

Also the police * in this district are in the habit of collecting drift boats and keeping the same though this is contrary to the law.

* I am not aware to what this refers.—C. H. E. A.

Report of the Lower Chindwin Forest Division.

From W. N. PORTER, Esq, Deputy Commissioner, Upper Chindwin, to the Conservator of Forests, Western Circle, Upper Burma,—No 152C., dated the 25th August 1893.

I HAVE the honour to forward herewith under separate cover the Annual Forest Report of the Lower Chindwin Division for 1892-93, with my remarks and those of the Deputy Commissioner, Lower Chindwin.

Remarks by W. N. PORTER, ESQ., Deputy Commissioner, Upper Chindwin, on the Lower Chindwin Division Forest Report for 1892-93

THE settlement of the Labin, Tan, Waye, and Kyaukka reserves will be undertaken by Lieutenant Obbard, the Subdivisional Officer, Kale-Kabaw, as soon as the open season commences.

The work will be easy as there are few, if any, villages in them and the only rights, the collection of forest produce.

The Myittha cutch forests are the finest I have ever seen, though the wood itself is not of the best quality for catechu-producing purposes.

Some special measures should, I think, in view of the scarcity of cutch tracts, be taken to preserve these forests either by declaring cutch a reserved tree or by only allowing hammer-marked cutch to be felled. I quite agree with Deputy Conservator, Mônywa, that it would be inadvisable to reserve any part of these forests owing to the numerous villages round, but at the same time cutch protection is necessary in some form or other.

A large log stockade built some years ago round Sihaung village is entirely composed of cutch timber.

A closer inspection of, and watchfulness over, the cutch-boilers in this part than has hitherto been exercised by the Forest Department is also required.

Last March I found several camps between Indin and Sihaung worked under false names and not in the places indicated by the licenses, which on enquiry I found had been obtained under false pretences.

The cutch tracts are a possible source of great wealth, and I should like, if the Conservator of Forests approves, to see some of the wealth, instead of going into the hands of outside speculators, finds its way into the pockets of local villagers who have a prior claim. I can quite understand that occasionally licenses sold to villagers at fixed fees are by them made over to speculators, but I think that if it were known that this was not allowable, and with the exercise of some care on the part of local officers, that the practice might be put a stop to; at any rate by way of experiment, I should like to have a few such licenses at fixed fees issued and see what the result would be.

The sale of licenses by public auction is of course the simplest and most remunerative way of raising revenue, but these are not the only considerations which should guide a Government policy in dealing with the people of this district.

I am glad to learn the assurance of the Deputy Conservator that by far the greater number of offences against the Forest Regulation are compounded. The majority of these offences are committed from ignorance, and until sufficient time and opportunity has been allowed to enable villagers to learn the law on the subject, I would very much deprecate their being prosecuted before the courts often situated at long distances from their homes.

In its very nature the forest law presses very hardly on the people even when mildly administered.

For men who ought to know the law or who have been previously warned that they are committing an illegal act I would have no consideration.

I should be sorry to see the grants of free timber licenses for works of charity or public utility curtailed in this district. Every care is taken that none but *bona fide* applications are entertained, and that the timber so obtained is devoted only to the uses for which granted.

If free licenses be not given, or only given in diminished number, the work of constructing and repairing pôngyi kyaungs and zayats will suffer, and the one off set to the numerous grievances of the people against the Forest Department will be done away with

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Remarks by Captain N. C. PERKINS, Deputy Commissioner, Lower Chindwin, on Lower Chindwin Division Annual Report for 1892-93.

AFTER consulting with Mr. Aplin, Deputy Conservator of Forests, the number of licenses for boiling cutch in this district have been largely reduced this year. It has been decided that the issue of licenses to local manufacturers as laid down in Rule 25 (3) has up to the present only resulted in a loss of revenue to Government without in any way

benefitting the so-called local manufacturers. Cutch-boiling as an industry has never been resorted to in this district by the villagers in whose immediate vicinity the cutch forests are to be found.

It has been their practice to obtain licenses from the Forest Officer at the fixed rate of Rs. 60 in their own names and then to let them out for Rs. 65 or Rs. 70 to some cutch-boilers from Lower Burma.

Mr. Aplin assured me that in all the cutch-boiling camps he visited in this district in 1892-93 a very small fraction of the boilers were local men. They were, on the other hand, nearly all Lower Burmans who had come up with the special object of boiling cutch and were working under cover of the local men's licenses. Under these circumstances Mr. Home, Conservator of Forests, Western Circle, Mr. Aplin, Deputy Conservator of Forests, and I agreed that all the licenses for this year should be sold by auction. The Commissioner, Central Division, concurred in this view. As the number of licenses for issue has been very much reduced the competition among traders is likely to be keen and in consequence the prices realized at the auction sales will, it is hoped, rule high.

Endorsement on the above by Major C. H. E. ADAMSON, C.I.E., Commissioner of the Central Division, Revenue Department,—No. 273C., dated the 30th August 1893.

THIS report must be forwarded to the Conservator of Forests.

During the year I have had no complaints against the action of Forest Officers and the work appears to be carried on without unnecessary friction.

The question of cutting cutch trees on what are alleged to be bobabaing lands should be regulated. Where land has been left neglected and uncultivated for so many years that cutch forests have sprung up, I am of opinion that such land should not be recognized as bobabaing without the direct orders of the district officers in each case.

Report of the Yaw Forest Division.

Endorsement on Yaw Divisional Annual Report by S. H. T. DE LA COURNEUVE, Esq., Deputy Commissioner, Pakôkku,—No. 2482, dated the 1st August 1893.

FORWARDED to the Commissioner, Southern Division. The report is due in Conservator's office on the 15th August 1893.

Endorsement on Yaw Division Annual Report by Major B. A. N. PARROTT, Commissioner of the Southern Division,—No. 4802, dated the 4th August 1893.

FORWARDED.

From D. Ross, Esq., Deputy Commissioner, Myingyan, to the Commissioner of the Southern Division,—No. 1436-2F.F., dated the 11th August 1893.

IN forwarding the annual report of the Deputy Conservator of Forests, Yaw Division, I have the honour to make the following remarks.—

1. The report relates to this district only with reference to the manufacture of cutch. The revenue from other sources is very small. It is now proposed to greatly reduce the number of cutch licenses as the forests have been overworked and want rest. I am of opinion that cutch trees on so-called bobabaing land should be treated in the same way as if it grew on ayadaw, and that for the present the felling of cutch trees should be altogether prohibited. The result of such a prohibition would be the reforestation of nearly the whole district, and in time to a much needed increase of the rainfall. Cutch grows readily everywhere and would soon cover the country if allowed to do so.

Endorsement on the above letter by Major B. A. N. PARROTT, Commissioner of the Southern Division,—No. 4987-18F., dated the 14th August 1893.

COPY of the following with the report forwarded to the Conservator of Forests, Mandalay. I agree with the Deputy Commissioner.

Report of the Minbu Forest Division.

Endorsement on Minbu Divisional Annual Report by D. L. M. MACKAY, Esq., Deputy Commissioner, Minbu,—No. 1884, dated the 3rd August 1893.

FORWARDED.

From Captain H. A. BROWNING, Deputy Commissioner, Magwe, to the Commissioner of the Southern Division,—No. 2409, dated the 11th August 1893.

I HAVE the honour to submit herewith the annexed report on the working of the Forest Department, Minbu Division, for 1892-93. It is hoped that the four forests which have been preliminarily notified as reserved will be finally demarcated and reserved this

coming dry season. I have only been a short time in the district and have had very little opportunity so far of watching the work of the Forest Department

The "serious case" referred to by the Deputy Conservator of Forests occurred in this district. A number of persons came forward and claimed to be allowed to work cutch on their own bobabaing land. It appeared from their statement that a number of such permissions had been given in the Yamèthin district. It was necessary to carefully go into each of these claims. "Bobabaing land" is a very elastic and somewhat unsatisfactory term, and one that requires a good deal of examination Otherwise, as in the case above referred to, men would be found cutting everywhere on land to which they had no real claim whatever

In a part of Gyokôn township near Gyokôn itself there is a large tract of some four Burmese miles square in which cutch trees abound which it might repay the Forest Department to entirely reserve.

Endorsement on the above by Major B A N Parrott, Commissioner of the Southern Division,—No. 4988-18F., dated the 14th August 1893

Copy of the above, with the report, forwarded to the Conservator of Forests, Mandalay. I think it would be a very good thing to reserve more cutch forests in the western portion of the Minbu district. There is a large area of land useless for any other purpose, and I think if reserved would in time become very valuable. Many years ago I noticed a lot of cutch all about the tract in which Tauk Ta has been infesting I think now is the time to make these reserves..

G. B. C. P. O.—No. 782, B. S., 5-2-94—300.